PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

LOWER PROVINCES OF BENGAL

FOR THE YEAR

1886-87

BY

A. L. HOME,

Conservator of Forests, Bengal.

Calcutta:

PRINTED AT THE BENGAL SECRETARIAT PRESS.

1887.

No. 142AR—G.

FROM A. L. HOME, ESQ.,

Conservator of Forests, Bengal,

TO THE SECRETARY TO THE GOVERNMENT OF BENGAL,
REVENUE DEPARTMENT (FORESTS).

Dated { *Darjeeling, 29th July* / *Calcutta, 4th August* } 1887.

SIR,

I HAVE the honour to forward herewith the Report on the Administration of the Forest Department, Bengal, for 1886-87, in print.

2. The forms Nos. 58 and 59 attached to the report under the Assistant Comptroller-General (Forests)' signature, and dated Calcutta, the 31st May 1887, were received on 4th June under his letter No. 500, bearing the former date, with an intimation that on receipt of verified figures from the Accountant-General, Bengal, revised forms would be forwarded for final adoption, if necessary. Intimation that the figures entered in those forms might be finally adopted as correct was received on 26th June 1887 in a letter No. 711, dated 24th idem. Until the latter date, therefore, the figures in those statements, being subject to alteration, could not be availed of for the compilation of the Report.

3. The divisional and sub-divisional reports and returns, due on 1st June 1887, reached this office on the following dates:—

	Despatched by Divisional or Sub-divisional Officer.		Received in Conservator's office.	
	Incomplete.	Complete.	Incomplete.	Complete.
	1887.	1887.	1887.	1887.
Working Plans division ...	.....	1st June	.....	2nd June
Darjeeling „ ...	.....	„ „	.....	4th „
„ sub-division ...	7th June	9th „	10th June	11th „
Teesta „ ...	.....	31st May	.....	4th „
Kurseong „ ...	.....	1st June	.....	4th „
Julpigori division ...	No date	15th „	11th June	26th „
Buxa „ ...	28th May	29th May	6th „	6th „
Chota-Nagpore „ ...	.....	15th June	.....	20th „
Palamow sub-division ...	8th June	24th „	17th June	28th „
Hazaribagh „ ...	.....	2nd „	.....	10th „
Singbhoom „ ...	8th June	20th „	17th June	25th „
Sunderbuns Division ...	20th May	3rd „	24th May	5th „
Chittagong „ ...	.....	10th „	.....	16th „
Orissa „ ...	1st June	23rd „	11th June	1st July

I have the honour to be,

SIR,

Your most obedient servant,

A. L. HOME,

Conservator of Forests, Bengal.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION IN BENGAL

For the year 1886-87;

BY

A. L. HOME,

Conservator of forests.

INTRODUCTION.

THE main points affecting the administration and working of the Department are:—

(1)—The formation of the Working Plans Division.
(2)—The inspection of the sâl forests in the Khondmals of Bôd by the Superintendent of the Tributary Mehals of Orissa.
(3)—The passing of rules for the collection of drift and waif wood on the river Gunduck.
(4)—The completion of the examination of private forests in Chota Nagpore and the appointment of a special Forest Settlement Officer to the proposed forest reserves in Singhbhoom.
(5)—The additional work thrown on the Conservator and his office by the new rules for the audit of revenue and timber accounts.

2. The Working Plans Division has completed the plan for the Bamonpokri forest of the Kurseong sub-division, which has been approved by the Local Government since the close of the year, and has well advanced towards completion the plan for the forests in the Darjeeling sub-division from which the stations of Darjeeling and Jalapahar and the adjacent tea gardens draw their supply of timber, fuel, fodder and grazing.

It is much to be regretted in the interests of the Department and of the public, as affecting on the one hand the permanent management on economic principles, and therefore the most efficient and financially successful working of the Government property in its charge, and on the other a continuous and uniform supply of the produce of the forests, that this Division cannot be maintained in order to prepare plans for other forests. There are no doubt many forests in this Circle from which material could be sold at a profit without diminishing their capital value; this opinion is however based on superficial observation only, and it is not considered advisable in the absence of a knowledge of facts to risk a possible trenchment on capital for the sake of swelling the revenue of the Department.

The Working Plans Division, owing to paucity of officers, must be closed to executive work from August 1887.

3. The sâl forests of the Khondmals of Bôd, an abstract of the inspection report regarding which was given in paragraph 2 of the Administration Report of this Department for 1883-84, were visited by the Superintendent of the Tributary Mehals of Orissa in January and February 1887, and it is understood that his views on the subject of their being constituted forests under the Act are before Government.

4. Rules under section 51 of the Indian Forest Act, for the collection of drift timber in the Gunduck river and its tributaries, so far as they flow in or along the boundaries of the Chumparun district, were passed by Government and published in the notification of 2nd February 1887, a similar notification as regards the north bank of the river having been simultaneously published by the Government of the North-Western Provinces and Oudh. Arrangements for the working of these rules through the Officer in charge of the Gorakhpur Forest Division in Oudh were agreed to by the Conservator of the

Oudh Circle, and the papers were forwarded to Government for consideration and orders shortly after the close of the year.

5. The examination of private forests in Chota Nagpore was completed during the year under report by Mr. F. B. Manson, Deputy Conservator of Forests, who was practically on special duty during almost the whole of the working season as Joint Forest Settlement Officer in Singbhoom; he has submitted some valuable suggestions on the general question of the management of these forests which will form the subject of a report to Government.

6. The whole of the check and audit of the monthly revenue and timber returns of the Department was at the commencement of the year thrown on to Conservators' offices, and from the 1st April 1887 the detailed check and audit of all items of revenue (which up to the close of the year under report rested entirely with the Comptroller-General), has also been made over absolutely to Conservators. The result of this in the case of Bengal, where the Conservator has no gazetted officer attached to his office, is that the time of the head clerk has now to be entirely devoted to the check and audit work thus made over; the Conservator is saddled with purely detailed and routine office work which was formerly done by his clerk, and can devote but little time (practically none in fact) to the supervision and check of the audit as carried out by him, while it is understood that the establishment of the Forest Branch of the Comptroller-General's office is maintained at its former strength though its work is confined simply to the audit of expenditure. The system is in the Conservator's opinion extremely inconvenient and from an audit point of view dangerous; he has been called on for a special report on the subject since the close of the year, which will be submitted to the Inspector-General of Forests to the Government of India shortly.

CHAPTER I.—AREA AND BOUNDARIES.

1.—Area of Reserved Forests.

7. These are shown below, with the changes that have occurred during the year:—

Division.	Area on 1st April 1886.	Added during 1886-87.	Excluded during 1886-87.	Area on 31st March 1887.
	Acres.	Acres.	Acres.	Acres.
Darjeeling sub-division, Darjeeling division	65,533	.....	.....	65,533
Teesta ditto, ditto ditto	160,185	.....	53	160,132
Kurseong ditto, ditto ditto	55,540	2	2	55,540
Julpigori division	118,343	.....	.....	118,343
Buxa ditto	160,462	.....	.....	160,462
Palamow sub-division, Chota Nagpore division ..	120,389	6,490	6,490	120,389
Hazaribagh ditto, ditto ditto ...	29,767	.....	.....	29,767
Singbhoom ditto, ditto ditto ...	344,600	.... .	2	344,598
Sunderbuns division	1,011,833	... .	... ..	1,011,833
Chittagong ditto	886,740	... ..	.....	886,740
Angul sub-division, Orissa division	179,200	... ..	... ..	179,200
Khorda ditto, ditto ditto	80,531	9,187	.. .	89 688
Total	3,189,123	15,559	6,457	3,191,225

The following areas were added to the reserved forests:—

Division.	Forest range.	Forest or block.	Area.	Reserved with effect from—
			Acres.	
Darjeeling— Kurseong sub-division ..	Balasan	Manjha block	2	1st June 1886
Orissa— Khorda sub-division ...	Dandimal ...	Haripur block	941	15th December 1886.
		Jamjhari ,, ...	300	
		Majana ,, ...	435	
		Bhola ,, ...	283	
		Daspore ,, ...	452	
		Bhatsapore ,, ...	2,932	
		Rampur ,, ...	1,125	
		Mendhasal ,, ...	815	
	Khorda	Jaimangal ,, ...	856	
		Nagapati ,, ...	1,408	
		Added by notification in the *Gazette*	9,159	
Chota Nagpore— Palamow sub-division ...	Rotlah	Kudh block	6,490	
		Added by rectification of area ...	6,600	

and the following were excluded:—

Division.	Forest range.	Forest or block.	Area.	Excluded with effect from—
			Acres.	
Darjeeling— Kurseong sub-division ..	Balasan	Manjha block	2	1st January 1887.
Chota Nagpore— Singbhoom sub-division	Ranchi	Horhap forest	2	1st April 1886.
		Excluded by notification in the *Gazette*	4	
Darjeeling— Teesta sub-division ...	Chel	Pugo block	53	
Chota Nagpore— Palamow sub-division .	Saidope	Kedh block	6,400	
		Excluded by rectification of area ...	6,453	

8. In the Manjha block, 1 acre 3 roods were made over to the Deputy Commissioner of Darjeeling to be leased to the Terai Planters' Association for a site for a doctor's house; in the Horhap forest, 1 acre 3 roods were given up in exchange for 2 acres of land in Horhap village, to be used as a site for the forest guards' house.

The exclusion by rectification of area in the Pugo block was caused by the revision of the boundary between the Darjeeling and Julpigoree districts in the notification of 3rd March 1887, the district boundary being mentioned in the description of the boundary of the forest in the notification under section 19 of the Indian Forest Act; that in the Kedh block is caused by a departmental redistribution of areas between the Betlah and Saidope Ranges of the Palamow sub-division.

9. Two sites of about 300 acres each are in course of demarcation at Labah and Rechi La, in the reserved forests of the Teesta sub-division, with the view to their being made over to the Deputy Commissioner of Darjeeling for settlements to be established at these places, to open up the district and encourage trade.

10. The forests that have been gazetted as proposed reserves under section 4, for which final notifications under section 19 of the Indian Forest Act have not issued up to the close of the year, are:—

Division.	Forest.	Approximate area.	Date of notification under section 4.
		Acres.	
Chota Nagpore— Hazaribagh sub-division ...	Khoorchoota	7,090	12th May 1886.
	Porahat (Girga)	16,640	26th November 1880.
	Birda	3,840	
Singbhoom ditto ...	Songra	35,200	20th February 1882.
	Kundrugutu	28,160	
	Bera	48,640	
Orissa— Khorda sub-division	Dandimal (Bhagbatipur block) .	456	7th April 1885.
	Total ...	140,026	

The Bhagbatipur block in the Khorda sub-division is the only area that is at present under the department by final notification under the Forest Act; it is a portion of the Khorda protected forests.

The question of the final reservation of the Khoorchoota forest is still under the consideration of Government.

11. By a notification dated 28th December 1886, Moulvi Wahedullah, Deputy Magistrate, and Mr. F. B. Manson, Deputy Conservator of Forests, were appointed to be Joint Forest Settlement Officers for the proposed reserves in the Singbhoom sub-division; their duties have been completed since the close of the year, and the final report on the settlement is expected to reach the Conservator shortly.

The final report regarding the Bhagbatipur block has not yet been received in the form prescribed by Government, though it is understood that all the requirements of the Act have been complied with by the Khorda Forest Settlement Officer.

12. A draft notification, under section 4 of the Act, regarding the proposed Rajin block in the Khorda sub-division, was forwarded to Govern-

ment during the year, but its publication is delayed pending the final settlement of the boundary between Banpur in Pooree and Gumsur Taluk in the Madras Presidency, which will, when settled, form one of the boundaries of this proposed addition to the Banpur range.

13. In the Darjeeling sub-division the Mineral Spring boundary dispute remains unsettled: in that with the Tungsong Tea Estate, the Collector declared the line laid down by the court ameen in March 1886 to be the true line of boundary and that laid down by the Survey of India to be incorrect: the line is not in dispute on the map but on the ground, and Colonel Lloyd, the proprietor of the estate, has been asked if he will accept the ameen's line as the line of possession; if he will not accept that line, the question of possession must be decided by the Civil Court.

No orders have been passed by the Collector in the Manjha Tea Estate boundary dispute in the Kurseong sub-division.

14. Compensation to villagers, &c., for removing from reserved and proposed reserved forests, amounting to Rs. 1,414, charged under head A VIII *b* in the accounts for the year, was paid on the following accounts :—

In the Palamow sub-division Re. 1, being balance cost of drawing up indentures of mouzahs Huttah and Daldalya for land included in the Kumandi and Ramandag reserved forests.

In the Singbhoom sub-division, Rs. 613; as compensation for lands taken up in the Horhap reserve, Rs. 57, and in the proposed reserves—Porahat (Girga) Rs. 29; Birda Rs. 132; Songra Rs. 43; Kundrugutu Rs. 85 and Bera Rs. 267.

In the Khorda sub-division Rs. 800 as compensation for lands taken up in the following blocks :—Barhapita Rs. 63; Haripur Rs 4; Jamjhari Rs. 28; Daspur Rs 32; Bharatpur Rs. 87; Panchgarh Rs. 126; Jaimangal Rs 3 and Sulia Rs. 457.

2.—Area of Protected and Unclassed State Forests and Waste Lands.

15. The area of these forests under the control of the Department is :—

Division.	Area on 1st April 1886.	Added during 1886-87.	Excluded during 1886-87.	Area on 31st March 1887.
Protected Forests.	Acres.	Acres.	Acres.	Acres.
Sunderbuns	1,242,917	.....	3,670	1,239,247
Orissa (Khorda sub-division)	176,928	.....	11,252	165,676
Total Protected Forests	1,419,845	...	14,922	1,404,923
Unclassed State Forests and Waste Lands.				
Chittagong	2,581,420	.....	.....	2,581,420

In the Sunderbuns division, 1,488 acres in the north portion of lot No. 110 and 2,182 acres in the north-west portion of lot No. 216 were declared by the notification of 7th September 1886 to have ceased to be protected forests from 1st April 1886; the land thus excluded was made over to the civil authorities to be leased for cultivation.

In the Khorda sub-division 7,303 acres in the Dandimal range and 1,854 acres in the Khorda range were declared to be reserved forest by the notification of 15th and 30th November 1886; 2,095 acres in the Banpur range were made over to the civil authorities, by whom they were leased for permanent cultivation; but no notification regarding this land has been issued, as the description of the boundaries has not yet been received.

3.—Demarcation.

16. The information contained in the table given in paragraph 15 of last year's report regarding the approximate length of boundaries and number of boundary marks has been corrected during the year for some Divisions and sub-divisions, but it is still far from accurate; the following statement shows the information on this subject so far as it is at present known, from which it will be observed that 1,921 miles of boundary in the reserved forests, including 285 miles in the proposed reserves in the Singbhoom sub-division, the settlement of which has been completed since the close of the year, are

artificially cleared and demarcated by 27,078 posts or pillars, and that 764 such marks are erected along 105 miles of natural uncleared boundaries, while 1,459 miles of natural boundaries exist in the reserved forests on which it is not necessary to resort to special means of demarcation.

The Protected and Unclassed State Forests and Waste Lands under the management of this Department do not require any special system of demarcation to be adopted, as these forests in the Sunderbuns division have natural boundaries in rivers and in demarcated leased lands, and in Chittagong and in the Khorda sub-division of the Orissa division they comprise all lands that are not leased for cultivation, those so leased having their own boundary marks.

Statement showing the approximate length of boundaries and number of boundary pillars or posts in the Reserved Forests in Bengal at close of 1886-87.

Division or sub-division.	Boundaries cleared and demarcated.				Natural uncleared boundaries, along which posts or pillars are erected.		Natural uncleared boundaries, along which posts or pillars are not erected.	Total for each Forest Division or Sub-division.		Remarks.
	Chargeable to A VIIc.	Chargeable to A VIIIa.	Chargeable to A VIIIc.	Number of posts or pillars.	Total length.	Number of posts or pillars.	Total length.	Length of all boundaries.	Number of posts or pillars.	
	Miles.	Miles.	Miles.		Miles.		Miles.	Miles.		
Darjeeling sub-division	.....	83·7	.....	1,068	11·5	169	73·8	167·4	1,234	Full number of posts in Goompahar range not given, boundary being disputed.
Teesta ditto ...	.....	302·9	.....	2,752	3·0	72	180·3	386·2	2,824	Incorrect as in last year's report, Sub-divisional Officer not having attempted to rectify omissions.
Kurseong ditto ...	7·8	54·0	46·5	1,418	6·1	20	84·6	203·2	1,438	
Julpigori division ...	.....	94·1	4·6	1,153	6·5	17	109·9	215·1	1,170	
Buxa ditto ...	.....	78·8	16·4	1,306	.....	.....	156·4	251·6	1,308	
Palamow sub-division	.....	.....	14·3	1,640	33·3	204	57·7	239·3	1,844	Length of boundaries incorrectly recorded last year.
Hazaribagh ditto ...	.....	.....	34·4	300	3·6	49	.....	38·0	439	
Singbhoom ditto ...	.....	634·7	.....	10,125	41·2	233	116·7	841·6	10,359	Includes boundaries that have been demarcated in proposed reserves. Correctness of figures doubtful.
Sunderbuns division ...	.....	.....	.....	.....	.....	.....	283·0	283·0	.....	
Chittagong ditto ...	.....	66·1	.....	1,332	.....	.....	431·5	497·6	1,332	Includes 260 standing trees on which boundary boards are fixed.
Angul sub-division ...	.....	.....	216·1	3,923	.....	.....	13·6	229·7	3,923	
Khorda ditto ...	.....	9·0	215·5	1,971	.....	.....	3·8	228·3	1,971	
Total ...	7·8	1,377·3	691·8	27,078	105·2	764	1,458·9	3,531·0	27,842	

17. The work done during the year is summarized in the following table, which accounts for Rs. 7,705 out of the total charges, Rs. 8,857, under A VIII*a* "Demarcation" during 1886-87; the balance Rs. 1,152 is made up of expenditure in the Singbhoom sub-division:—Rs. 20 on cleaning lines for the Imperial Forest Survey party and Rs. 796 on special settlement establishments in the Porahat forests, and in the Khorda sub-divisicn Rs. 336 on pay of ameens and chainmen employed on forest settlement duty.

Division or sub-division.	New Demarcation.				Clearing and maintaining boundaries and boundary marks.					Length of boundaries demarcated and cleared during 1886-87.
	Length of boundaries.	Marks erected.	Cost against A VIIIa "Demarcation."	Average cost per mile.	Length of boundaries.	Number of marks renewed.	Cost against A VIIIa "Demarcation."	Average cost per mile.	Charged against A VIIIc "Protection from fire."	
	Miles.	No.	Rs.	Rs. A. P.	Miles.	No.	Rs.	Rs. A. P.	Miles.	Miles.
Darjeeling sub-division	...	...	.....	.....	83·7	320	408	5 15 0	.....	83·7
Teesta ditto	...	...	.....	.....	192·0	362	957	5 0 0	.....	192·0
Kurseong ditto	...	...	.....	.....	56·3	94	509	9 0 0	46·5	102·8
Julpigori division	...	...	.....	.....	88·4	234	940	10 10 0	4·6	93·0
Buxa ditto	...	...	.....	.....	78·8	*	1,243	15 12 0	16·4	95·2
Palamow sub-division	...	...	.....	.....	.....	*	20	.....	148·3	148·3
Hazaribagh ditto	...	...	.....	.....	.....	36	10	.....	34·4	34·4
Singbhoom ditto	46·0	*	95	2 1 0	638·7	*	1,021	2 9 0	.....	684·7
Ditto charges of 1885-86	...	...	.....	.....	.....	.....	3·0	.....	.....	.....
Chittagong division	23·0	568	278	12 9 0	44·1	*	406	10 9 0	.....	66·1
Angul sub-division	...	...	.....	.....	.....	*	1	.....	216·1	216·1
Khorda ditto	9·0	*	97	10 11 0	53·7	*	505	9 6 0	161·8	224·5
Do. ditto	...	340	155	.....	.....	.....	.....	.....	.....	.....
Total ...	77·0	...	625	8 2 0	1,235·7	.....	7,060	5 12 0	629·1	1,940·8

* Information not given in Divisional Annual Reports.

18. The charges per mile, with the exception of those in the Teesta and Singbhoom sub-divisions for maintenance, are considerably below those of the previous year; the average for new demarcation is Rs. 8-2, against Rs. 14-5 as shown in paragraph 17 of the report for 1885-86 (which latter should however have been considerably less, as the figures showing cost for the Orissa division on the 116 miles of new demarcation included the cost of clearing and maintaining old lines and the pay of the Khorda Forest settlement establishments, of which no particulars were given by the Divisional Officer in his report), and the average for the maintenance of old boundary lines is Rs. 5-12, against Rs. 6-15 in that year, when, for the reason above explained, the actual expenditure on this account was understated.

The 340 boundary marks erected in the Khorda sub-division at a cost of Rs. 155 are cut stone pillars.

The total length of boundaries cleared, the charge for which is debited to "Demarcation," is 1,312·7 against 1,114 in the preceding year, while 628 miles were cleared for fire lines against 593 in 1885-86.

19. The demarcation of the boundaries of the Angul reserves bordering on native states has been commenced by the Cadastral survey party, and an enquiry, with the view to the demarcation of the boundaries in Singbhoom, between the Singbhoom and Lohardugga districts and Singbhoom and the States of Bonai and Gangpur, which border on forest reserves, has been commenced since the close of the year by a Special Deputy Collector, but it is not expected that they will be finally settled till next cold weather.

A notification, dated 5th July 1886, has been issued rectifying the description of the south boundary of the Raidak reserve in the Buxa division.

CHAPTER II.—SURVEYS, WORKING PLANS AND ANNUAL PLANS OF OPERATIONS.

1.—Surveys.

20. The work was continued in the Saranda, Santara, and Latua reserves and in the Girga, Birda and Bora proposed reserved forests, by the party of the Forest Survey Branch in the Singbhoom sub-division, and it is reported that the survey of 431½ miles of inner and outer boundaries was carried out during the season. The total expenditure on surveys elsewhere was Rs. 171.

2.—Working Plans, and Annual Plans of Operations.

21. The measurements of some of the trees felled by permit-holders during the year are recorded in Appendix A to this report, and Appendix B shows in how far the operations in the several forests for which prescribed working plans have been framed were carried out. The Conservator regrets that the compilation of Appendix A has practically been altogether neglected except in the Darjeeling and Kurseong sub-divisions; the Sunderbuns report is accompanied by a statement of some measurements, which however the divisional officer states are unreliable.

22. The *Working Plans division* was formed in April 1886, under Mr. E. G. Chester, Deputy Conservator of Forests, who was however only able to give a portion of his time to the work, owing to his various other duties which comprised the charge of the Darjeeling division throughout the year, and of the Department in Bengal, when he acted as Conservator for nearly three months, from June to August; in the early part of the year he had also charge of the Darjeeling and Teesta sub-divisions.

23. The work was confined to certain forests of the Darjeeling division; the first to be taken in hand was the Bamonpokri forest in the Kurseong sub-division, for which a plan had been sketched out some years previously by Mr. F. B. Manson, Deputy Conservator, when he was in charge of the division, and the compartments had been laid down by Mr. Heinig, Assistant Conservator, during 1885-86. The enumeration of stock was carried out by Mr. French, who commenced the work in June and continued it through the rains. The field work was completed by the end of December, and the working plan, which was forwarded to the press in March 1887, has since the close of the

year been approved by the Inspector-General of Forests to the Government of India, who has recommended that it be accepted unconditionally by the Government of Bengal.

24. The forests of the Darjeeling sub-division which are capable of being worked for the supply of the stations of Darjeeling and Jalapahar, and the adjacent tea gardens, primarily for fuel, fodder and grazing, and secondarily for timber, were next taken in hand, and work commenced on 21st December 1886. The result of preliminary calculations as to the probable out-turn proved that the area included in the Darjeeling and Jalapahar working circles of Dr. Schlich's memorandum of 21st April 1882, was insufficient to meet the demand of the above consumers, which has considerably increased in the last five years, without absolutely closing the forests to grazing; some of the more distant forests have therefore been brought into the working circles. It was necessary in order to obtain a general capability figure as to out-turn that the enumeration in these forests, which cover 18,023 acres and are situated on difficult ground, should extend over a considerable area, and as a fact all trees on 2,742 acres were counted and classed; this work was done by Messrs. James, Wittinbaker and the trained enumerator under Messrs. Chester and French's supervision, and the compartment lines were laid down by those officers personally, which entailed many long and fatiguing days' climbing up and down the hills. At the time of writing this report the manuscript of the draft working plan is almost ready for press: it would have been ready earlier, but that since the close of the year Mr. Chester has again been called on to resume charge of the Darjeeling sub-division in addition to his other duties.

The expenditure under "Surveys and Working Plans" in this division was Rs. 1,109.

25. *Darjeeling sub-division.*—From the particulars of operations under the working plan of 1882 for the Darjeeling and Jalapahar supply circles given in Appendix B, it will be observed that the out-turn of the former is 62,003 cubic feet of wood in excess of, and of the latter 59,017 below the provisions of the plan; the out-turn from the two circles together is therefore practically what was anticipated, and is 502,986 cubic feet of wood against 421,437 in 1885-86, chiefly owing to increased demands from the Military Department for fuel for the troops at Jalapahar.

26. *Kurseong sub-division.*—The return for the Sukna working circle shows that the demand is not yet equal to the supply, and this is certainly the case except for sâl timber, of which there is practically none available; the out-turn from thinnings is not applied for under the system of tenders in force as considerable labour and expense is entailed in collecting the fuel scattered as it is over considerable areas; but as the private forests become exhausted (a state they are steadily arriving nearer to, year by year), a demand will certainly spring up for all that can be obtained from this working circle: before that time arrives however it is hoped there will be an opportunity for revising the working plan now in force, which is based on an estimated yield in excess of the true capability of the forests.

27. *Buxa division.*—The registers of yield of the Buxa reserve working circle for 1886-87 and the previous year, show that the out-turn of compartment 14 of the Poro block was 583 sâl trees of 6 feet girth and upwards only against an estimated capability of 2,532; the trees were very poor, and gave an average of 38 cubic feet of timber fit for scantling, &c., much of which turned out to be unsound when sawn into sleepers. In the compartments fixed for felling in 1887-88 and 1888-89 fellings were made in advance, partly to meet an indent accepted from the State Railway for sleepers, when it was discovered that the out-turn of compartment 14 was so poor, and partly to allow of the timber to season before conversion; badly grown sâl trees that had been overlooked in the compartments of the Poro block previously cut over, and whichwould yield sleepers, were also cut during the year.

28. *Orissa division.*—The Chandka and Churang blocks in the Dandimal range, Khorda sub-division, have been divided into 22 and 10 compartments respectively, and a plan has been laid down by the Divisional Officer under which one compartment will be worked each year, thorns, creepers, stumps and deformed and useless trees being removed for the improvement of the forest growth; compartments 2 and 1 of these blocks were treated in this manner during the year under report.

CHAPTER III.—PROTECTION AND IMPROVEMENT.

1.—Establishments.

29. Mr. A. L. Home, Conservator of Forests, was in charge of the Department throughout the year, except from 9th June to 20th August 1886, when he was absent on privilege leave owing to ill-health, and Mr. E. G. Chester, Deputy Conservator, officiated as Conservator; he was also in charge of the Darjeeling and Working Plans divisions from 9th to 31st October 1886, and has continued to officiate in the 2nd grade of Conservators from 21st June 1886.

30. The controlling staff remained throughout the year one officer short of its sanctioned strength in the class of Assistant Conservators; the executive staff was strengthened by the appointment of two Sub-Assistant Conservators on probation, Messrs. E. J. N. James and R. Quinnell, thus bringing the complement of officers in that class up to the sanctioned number, Mr. E. E. Slane having been similarly appointed with effect from 6th March 1886. No officers of the controlling staff or of the class of Sub-Assistant Conservator were on leave other than privilege or examination leave during the year, except Mr. W. Johnston, Deputy Conservator, who proceeded on furlough on medical certificate at the end of March 1887.

31. There was the same difficulty as has been noticed in former reports in obtaining the services of suitable men as foresters; candidates are willing enough to take up the sedentary work of issuing permits in the Sunderbuns and Chittagong divisions, but as a rule decline to join appointments in the forests. As regards the suitability of natives of India for appointments to the controlling staff, a case may be instanced in which a well educated candidate in applying for such an appointment enquired whether "Assistant and Sub-Assistant Conservators are ever required to go to the forests;" he was answered in the affirmative and has not since resumed his application.

32. The class of rangers and the protective staff remained practically on the same footing as in the previous year, though the maximum amount sanctioned by the Government of India for Forest, depôt, and office establishments was more nearly worked up to, as it was found necessary, for the protection and working of the forests, to fill up most of the sanctioned posts in these classes, which were distributed at the close of the year as shown in the statement given below, in which the areas are given for all classes of forest under the department, including proposed reserves which do not form part of the forests shown in forms Nos. 49A and B.

Division or sub-division.	Forest Rangers.		Foresters.		Forest Guards.		Clerks.	Peons.	Menials.
	Number.	Area to each.	Number.	Area to each.	Number.	Area to each.			
		Acres.		Acres.		Acres.			
Direction	.....	.....	4	.....	.....	... ..	4	4	1
Working plans	1	.....	.....	.....	.....	.....	1	2	.....
Darjeeling division	.....	.....	.....	.....	.....	.. ...	1	1	.....
Ditto sub-division	3	21,844	2	22,766	21	2,082	2	2	.....
Teesta ditto	1	160,132	3	53,377	20	5,333	1	2	1
Kurseong ditto	2	27,770	4	13,885	35	1,587	2	2	1
Julpigori division	2	118,343	4	29,586	24	4,921	1	2	1
Buxa ditto	1	169,463	6	28,244	23	7,703	2	2	1
Chota Nagpore ditto	.....	.....	.....	.....	.....	.....	3	3	1
Palamow sub-division	2	60,194	3	40,130	23	5,234	2	2	1
Hazaribagh ditto	1	36,857	.....	.....	4	9,214	.....	.....	.....
Singhbhoom ditto	2	233,539	4	116,769	36	12,974	2	2	1
Sunderbuns division	5	450,216	34	66,208	21	107,194	5	4	1
Chittagong ditto	3	1,156,083	12	389,013	49	70,779	3	3	.....
Orissa ditto	.....	.....	.....	.....	.....	.....	2	2	1
Angul sub-division	1	179,200	3	59,733	15	11,947	1	1	.....
Khorda ditto	.....	.....	4	56,341	18	12,520	1	1	.....
Total ...	23	818,136	83	88,158	308	23,767	33	35	10

33. The orders of Government were received during the year on the case of Baboo Kedar Nath Roy, late head clerk of the Sunderbuns division, who had been under suspension since 28th April 1884, and he was dismissed the service.

Baboo Rakhal Das Mukerjee, a forest ranger in the Darjeeling sub-division who had obtained a certificate at the Forest School, Dehra Dùn, was suspended for gross impertinence to the Divisional Officer; he was subsequently allowed to resign his appointment which he did on obtaining a clerkship in a merchant's office in Calcutta, employment which he preferred to forest work. The Conservator considers that men who have drawn Government pay for the

period they are under training at the Forest School, about two years, ought to be bound down by agreement to serve in the department for fixed periods.

Baboo Tin Kowri Chowdhury, Officiating Forest Ranger, whose case is referred to in paragraph 27 of last year's report, was reinstated by order of Government, and posted to the Kurseong sub-division.

Kosial, Forest Guard, Singbhoom sub-division, was prosecuted for misappropriation of Rs. 12 entrusted to him, and was on conviction sentenced to six months' rigorous imprisonment and fined Rs. 12, or in default two months.

In the Chittagong division three forest guards, Amir Hamza, Nuruddin and Sham Sher Ali, who were dismissed the service by the Divisional Officer in connection with the case against Baboo Tripura Churn Surma, Officiating Forester, in 1884, were reinstated during the year by order of Government.

In the Orissa division two forest guards were prosecuted for misappropriation of sale proceeds of forest produce; one was acquitted for want of evidence, and the case against the other was pending at the close of the year.

2.—General Protection and Breaches of the Forest Law.

34. The reserved forests in the Darjeeling, Julpigori, Palamow, Lohardugga and Hazaribagh districts, and those in the Angul and Khorda sub-divisions of Orissa, were closed against hunting, shooting and fishing under the fire protection rules of 11th December 1880 during the dry season of 1887 by Government notifications, and lists of camping grounds in those forests were published by order of the Conservator.

35. The number of new cases of breaches of the Forest law taken into court during the year was 839; with 94 cases from the previous year and 13 at the close of the year pending, the number of cases decided by the courts was 920, of which 821 or 89·2 per cent. resulted in convictions. The figures for the preceding year and for 1884-85 were: cases disposed of 558 and 422; percentage of convictions 86·4 and 87-1, respectively. The number of cases disposed of has more than doubled in the two years, and the percentage of convictions is very high, which is certainly a satisfactory result when the difficulty there is in obtaining independent evidence of forest offences having been committed is considered; this shows, in the Conservator's opinion, that the forests are better protected than they were in former years, and that officers have shown great judgment in the selection of cases to be taken into court.

36. The following table contains a summary of Form No. 50 appended to this report, but with fuller particulars than are there given as to the number of persons implicated; it also shows the number of cases compounded under section 67 of the Indian Forest Act, together with the amount of compensation accepted.

Division or sub-division.	Pending 1st April 1886.		Taken into court.		Total.		Convictions.		Acquitted or discharged.		Pending 31st March 1887.		Cases compounded.	
	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	Number.	Amount.
Under the Indian Forest Act.														Rs. A.
Darjeeling sub-division	...	...	238	279	238	279	232	273	6	6	...	...	38	109 8
Teesta ditto	...	...	19	22	19	23	16	19	1	1	2	2	161	626 8
Kurseong ditto	...	...	15	23	15	23	10	12	4	11	1	1	10	106 10
Julpigori division	...	...	4	6	4	6	3	4	...	...	1	2	1	6 0
Buxa ditto	...	...	7	18	7	18	6	16	1	2	...	...	3	98 0
Palmow sub-division	...	...	2	2	2	2	2	2	...	...	...	...	18	205 7
Hazaribagh ditto	...	...	...	.....	...	.....	...	.....	...	...	...	...	5	6 6
Singbhoom ditto	...	...	24	89	24	89	13	53	9	34	2	2	24	350 14
Reserved forests, Sunderbuns division	88	99	237	269	325	368	294	318	28	33	3	17	386	2,936 0
Protected forests, Sunderbuns division	3	3	13	15	16	18	9	9	7	9	...	...	62	369 0
Chittagong division	...	...	4	18	4	18	...	...	2	3	2	15	...	.....
Khorda sub-division	...	...	164	422	164	422	133	323	31	99	...	...	94	571 0
Angul ditto	2*	13	10	57	12	69	11	59	...	...	1	10	83	493 4
Total ...	93	114	737	1,220	830	1,334	729	1,087	89	198	12	49	882	5,857 0
Under the Penal Code.														
Chittagong division	1	1	2	3	3	4	2	3	...	...	1	1	...	.....
Khorda sub-division	...	...	100	226	100	266	90	241	10	25	...	...	...	.....
Total ...	1	1	102	229	103	270	92	244	10	25	1	1	...	.....
Grand Total ...	94	115	839	1,489	933	1,604	821	1,331	99	223	13	50	882	5,857 0

* Shown in paragraph 29 of last year's report erroneously as pending under the Penal Code.

The number of cases compounded has risen from 739 to 882, while the amount of compensation accepted is Rs. 2,834 less than in 1885-86; this

however is more than explained by the case in the Sunderbuns division noticed in paragraph 36 of last year's report, in which Rs. 4,135 were accepted as compensation for the cutting of *sundri* firewood against rules east of the Pussur river. This system of dealing with forest offences has continued to work satisfactorily, and in no single case has an appeal been made to the Conservator against the estimation of damage made by officers under section 67 of the Indian Forest Act.

37. The cases disposed of by the courts, and those compounded, may be thus classified:—

	Cases disposed of.	Convictions.	Percentage of convictions.	Cases compounded.
Injury to forest by fire	25	21	84·0	1
Unauthorized felling or appropriation of wood and minor forest produce	151	141	93·4	88
Grazing without permission or in tracts in which grazing is prohibited	234	219	93·6	238
Other offences	510	440	86·3	79
Total	920	821	89·2	882

38. *Darjeeling sub-division.*—There was again a large increase in the number of cases taken into court, 238 involving 279 persons against 185 and 216 persons in the previous year, and the percentage of convictions was 97·5, which shows that there was full justification in that increase. The number of grazing cases taken into court rose from 85 to 123 (121 convictions) and of lopping cases fell from 26 to 20 (all convictions).

In the cases in which convictions were obtained, 118 for illicit grazing and 108 for unauthorized felling were punished by fines aggregating Rs. 1,482, of which sum Rs. 855-12 were paid as rewards to informers by order of the courts; in a case for lighting fire in the forest outside an authorized camping ground the punishment was one month's imprisonment, and the same punishment was inflicted in two cases of illicit removal of firewood and cutting saplings, while in three grazing cases the punishment was one week's imprisonment.

The cases compounded were:—

	Cases.	Compensation accepted. Rs. A.
Unauthorized felling	19	46 8
Grazing	18	59 0
Other offences	1	4 0

out of which Rs. 42-8 were granted as rewards to informers under the Conservator's orders.

The number of cattle impounded fell from 1,035 to 563.

39. *Teesta sub-division.*—The results as to convictions and cases compounded were:—

	Cases.	Punishment by the Court.	Cases compounded.	Compensation accepted. Rs. A. P.
Injury to forests by fire	4	Fines from Re. 1 to Rs 10 ...	1	25 0 0
Unauthorized felling	6	Fines from Re. 1 to Rs. 5 ...	12	44 8 0
Grazing	5	Fines from Rs. 5 to Rs. 20 ...	133	527 14 0
Other offences	1	Fined Rs 2 each ...	15	29 2 0

The Sub-divisional Officer is unable to give a distribution of the number of persons (19) convicted in these 16 cases under the several heads of form No. 50 that agrees with the number there shown. The four fire cases belong to the fire season of 1886.

40. *Kurseong sub-division.*—The number of cases taken into court fell from 23 to 15, and of cases compounded from 17 to 10 as compared with the previous year.

The convictions and punishments were:—

	Cases.	Persons.	Punishment by the Court.	Cases compounded.	Compensation accepted. Rs. A. P.
Unauthorized felling	6	7	Five men fined Rs. 10 each, two men fined Rs. 30 each, with one month's imprisonment ..	4	12 8 0
Grazing	3	3	Two men fined Rs. 20 and 10, one man fined Rs. 30, with one month's imprisonment	6	94 2 0
Other offences	1	1	Fined Rs. 2	...	.....

The number of cattle sent to the pounds was 977 against 853 in the previous year.

41. *Julpigori division.*—There were four cases involving six persons, all for causing injury to the forests by fire, taken into court during the year under report, of which one remained pending at the close of the year. Convictions were obtained in three cases against four persons; the punishments, which in the Conservator's opinion appear to be very inadequate, except in the case of one person who was sentenced to three months' imprisonment for causing a fire in the season 1886—were, one person fined Rs. 5 and two persons Re. 1 each or four days' imprisonment. One case only was compounded for illicit grazing, Rs. 6 being accepted as compensation.

42. *Buxa division.*—Of the seven cases in which 18 persons were implicated, one concerning two persons for unauthorized felling resulted in an acquittal; in a case of firing the Southern block of the Mahakalguri forest accused was fined Rs. 10, and in five cases under the head "Other offences" in which 15 persons were involved, fines aggregating Rs. 295 were inflicted by the Court and the sum was granted as rewards to the Buxa and Borojhar range officers. Two cases of illicit felling were compounded for Rs. 76, and one case of illicit cotton cultivation for Rs. 20.

43. *Palamow sub-division.*—The two cases instituted for firing forests resulted in the conviction of the accused; one person for firing the Ramandag forest in the fire season of 1886 was sentenced to 15 days' and the other for firing the Kedh block in 1887 to one month's rigorous imprisonment. The cases compounded were four for illicit felling and 14 for illicit grazing, compensation of Rs. 116 being accepted in the former and Rs. 89-7 in the latter cases.

44. *Hazaribagh sub-division.*—Only five cases involving 11 persons were brought to light during the year, of which four were for illicit removal of minor produce and one under other offences; these were compounded for Rs. 6-6.

45. *Singbhoom sub-division.*—Out of 22 cases involving 87 persons decided by the courts during the year, 13 in which 53 persons were implicated resulted in convictions, seven of which were for firing various forests, and six for the illicit removal of forest produce, chiefly from the Saitba block; particulars of the courts' orders on these cases are not givin in the sub-divisional report nor of the 22 cases which were compounded for Rs. 330-14.

46. *Sunderbuns division, Reserved Forests.*—There were 88 cases involving 99 persons pending from the previous year, and 237 cases (269 persons) of the year were taken into court; of these 294 (318 persons) resulted in convictions, 28 (33 persons) in acquittals, of which 25 were struck off as the parties could not be found by the police, and three cases (17 persons) remained pending at the close of the year. Of the cases disposed of, 320 were for the non-return of permits, and resulted in 292 convictions, while convictions were obtained also in two cases of illicit removal of produce.

The Divisional Officer remarks that the punishments inflicted for non-return of permits were altogether inadequate, but gives no particulars regarding them. The prosecutions of manjees for non-return of permits had to be stopped, as the revenue was suffering owing to the constant absence of foresters from their stations in attending the courts, and it was found that the manjees had taken to giving false names so that the police were unable to arrest them.

The number of cases compounded rose from 317 to 386; the amount of compensation accepted during the year was Rs. 2,936.

47. *Chittagong division, Reserved Forests.*—Four cases were instituted against 18 persons for illicit removal of produce, of which two involving 15 persons were pending at close of the year. The cases disposed of were lost; one was dismissed on the ground that it was not proved that the produce had been taken from the Hill Tracts forests, and the other owing to the non-appearance at Court of the forest guard on the date fixed, as he could not obtain a substitute at short notice and very properly therefore remained at his station: a retrial of this case was applied for, but was disallowed by the Commissioner.

48. *Sunderbuns division, Protected Forests.*—Thirteen cases involving 15 persons were instituted, and there were three pending from the previous year. Convictions were obtained in nine cases (nine persons) only, and 62 cases were compounded for Rs. 369.

49. *Chittagong division, Unclassed State Forests and Waste Lands.*—The case pending from the previous year was not finally settled during the year under report. In two cases against three men for damming rivers, instituted under section 283 of the Indian Penal Code, convictions were obtained and defendants fined—one man Rs. 10, and two others, Rs. 5 each.

50. *Orissa division.*—In the Angul sub-division convictions were obtained in all cases (11) decided by the court, of which three were for firing the forests and eight for unauthorized removal of produce, while in the Khorda sub-division convictions were obtained in 223 out of the 264 cases disposed of, of which 99 were illicit grazing cases and 165 come under the head "Other offences." The Divisional Officer has not given particulars of the orders of the court, and remarks only that "the punishments inflicted were trivial in each case, being fines from 8 annas to Rs. 7, and imprisonment for one or two weeks." The total number of cases compounded in the division was 176, of which 90 were for illicit felling and 86 for grazing; the compensation accepted amounted to Rs. 1,064-11.

3.—Forest Fires.

51. The whole area of the reserved forests that is liable to fires, excepting 236,220 acres in the Singbhoom sub-division, was attempted to be protected either by special measures (isolation) or under rules, and the result of the measures adopted as shown in the table below has been more satisfactory than in any previous year, while the expenditure incurred during the dry season 1887 has been less than in any of the three preceding seasons, though the area attempted to be protected by isolation has increased from 530,071 to 839,043 acres during that period, and the area actually so protected has risen from 491,752 to 729,136 acres.

52. It was deemed advisable to confine special measures for fire protection in the Singbhoom sub-division to the areas attempted in the dry season 1886; these could to a certain extent be looked after by the range officers, who were required to render assistance in forest settlement work, and to attend to line clearing for the Imperial Forest Survey party during the early portion of the fire season of 1887: the Conservator trusts in another year or two to be able to greatly extend the area under special protection in Singbhoom.

53. The form No. 51 attached to this report, of Parts I and II of which the following table is an abstract, has been prepared under the system which is understood to have been adopted at the Forest Conference held at Dehra Dún in October 1886, and shows the area actually fired, whether intentionally or otherwise, and the whole area of the reserved forests in the Circle:—

Division or Sub-division.	Up to 31st May 1886, by isolation and by rules.		During dry season 1887.								Total cost from 1872 up to 31st May 1887.
	Area actually protected during dry season 1886.	Total cost from 1872	Area attempted to be protected.		Failures.		Area actually protected.		Amount expended.		
			By isolation, &c	By less extensive measures and by rules.	Under isolation system.	Under rules, &c., system.	Under isolation system.	Under rules, &c., system.	Under isolation system.	Under rules, &c., system.	
	Acres.	Rs.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Rs.	Rs.	Rs.
Darjeeling sub-division	65,773	1,261	..	65,533	.....	.....	...	65,533	.....	57	1,320
Teesta ditto	138,075	5,953	61,921	98,211	... ..	.....	61,921	98,211	1,046	349	9,918
Kurseong ditto ..	55,291	26,457	82,154	3,386	186	4	51,966	3,382	3,794	34	30,293
Julpigori division ..	112,880	9,725	118 331	12	19,511	.....	98,820	12	1,748	9	11,511
Buxa ditto ..	112,287	40,074	116,002	.....	820	... ..	115,533	... .	3,205	.....	44,279
Palamow sub-division	119,149	10,860	120,389	... ..	3,970	.....	116,419	.....	1,091		11,951
Hazaribagh ditto	29,767	1,367	29,767	.. .		.....	29,767		343	.	1,710
Singbhoom ditto ...	20,900	1,211	101,120	1,098	55,642	.....	45,478	1,098	1,325	2	2,538
Chittagong division ...		699	471	...		.....	471	... ..	191	.....	895
Angul sub-division ...	106,614	1,167	179,200	. ....	26,580	... ..	152,620	.....	618	.....	1,985
Khorda ditto ...	80,311	193	59,988	..	3,396	.. ...	56,292	... .	393	....	586
Total ...	.....	.....	839,043	168,240	109,907	4	729,136	168,236	13,927	451	... ..
Grand Total ...	830,618	98,989	1,007,283		109,911		897,372		14,378		1,13,877

54. Of the 839,043 acres attempted to be protected by isolation, 729,136 acres or 86·9 per cent. escaped fire at a cost of 3·7 pies per acre, the figures for the previous year having been 80·9 per cent. of success on area attempted at a cost of 4·4 pies per acre. The improved protection of the Singbhoom and Orissa forests, which are severely handicapped owing to unsettled and uncleared

boundaries adjoining semi-independent states and in which it is impossible to expect at present any great measure of success, is very satisfactory, and the failures in the Julpigori Division, which spoil what would otherwise have been a most successful season for the forests in which protective measures have been matured, were in the Conservator's opinion due chiefly to neglect in the proper posting of fire-guards and of inspection of fire lines by the Divisional Officer, whose state of health prevented his proceeding on tour during January, February and March.

55. The following table shows the whole areas of the reserved forests that escaped fire, with or without special measures being adopted for their protection :—

Division or Sub-division.	Total area of reserved forests.	Burnt.			Successfully protected under isolation, &c., and rules systems.	Escaped fire without any measures of protection being adopted.	Total area that escaped fire.
		Under isolation, &c., and rules systems.	Out of unprotected areas liable to fires, including those burnt purposely, with the view to protecting other areas.	Out of areas usually free from fire for which no measures of protection are considered necessary.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Darjeeling division—							
Darjeeling sub-division... ...	65,533	.....	.....	.....	65,533	.....	65,533
Teesta ditto	160,132	.....	.....	.....	160,132	.....	160,132
Kurseong ditto	55,540	192	.....	.....	55,348	.....	55,348
Julpigori division	118,343	19,511	.....	.....	98,832	.....	98,832
Buxa ditto	109,402	620	2,040	.....	115,383	51,420	166,802
Chota Nagpore division—							
Palamow sub-division ...	120,389	3,970	.....	.....	116,419	.....	116,419
Hazaribagh ditto	29,767	.....	.....	.....	29,767	.....	29,767
Singbhoom ditto	334,598	55,042	236,220	.....	42,736	.....	42,736
Sunderbuns division	1,011,833	.....	.....	.....	.....	1,011,833	1,011,833
Chittagong ditto	886,740	.....	.....	.....	471	886,269	886,740
Orissa division—							
Angul sub-division	179,200	26,580	.....	.....	152,620	.....	152,620
Khorda ditto	59,088	3,396	.....	.....	55,292	.....	55,292
Total ...	.....	109,911	238,260	.....	.....	.....	.....
Grand Total ...	3,191,225	348,171			893,532	1,949,523	2,843,054

In the Singbhoom sub-division the Birda block of the Porahat range, a proposed reserve with an area of 3,840 acres, not included in the above table was also successfully protected by special measures.

Of all the reserved forests 89 per cent. escaped from fires during the dry season of 1887, compared with 87 per cent. in 1886.

56. *Darjeeling and Teesta sub-divisions.*—The whole of the reserved forests were free from fires during the season, which was an exceptionally favourable one owing to heavy rainfall in the early months of the year.

57. *Kurseong sub-division.*—The season was again a favourable one, and although most of the adjoining forests were burnt over as usual during the dry season, the efforts of the department were almost entirly successful, 192 acres only having been burnt out of the 55,540 which were protected by special measures and rules; in the former 94 acres were fired in the Sivoke block of the Champasari range, and a similar area in the Mechi forest of the Balasan range, where portions of the Nipania and Kolabari blocks were injured: both these fires entered the forests from private estates adjoining them and no clue was obtained as to the persons who originated them. A small fire, which spread over four acres, occurred in the Dhobijhora forest of the Kurseong range, just above the school compound; the cause is not known, but it was quickly extinguished and did little damage.

58. *Julpigori division.*—The area burnt was 19,511 acres, or 16·5 per cent. of the area attempted, and this is the worst record for the division since 1882-83, when 30,000 acres were burnt.

In the Apalchand range three fires occurred:—Guzliduba block, about 1 pole, the offender was convicted and fined Rs. 5: Chengmari block, two fires, one over 1,000 acres and the other 1 acre; the originators were not discovered and the areas burnt are reported to be all grass lands.

In the Tondu range there were two fires: one of 40 acres (36 grass and 4 sâl forest) in the Upper Tondu block, the originators of which (two persons) were fined Re. 1 each or four days' imprisonment, and the other of 1,400 acres

(1,000 grass and 400 sâl forest) in the Lower Tondu block, the origin of which was not discovered.

In the Muraghat range 11,520 acres of the Dainah (Sissu) forest were burnt; 5,440 of the Muraghat (sâl) forest; and 110 acres of the Ghosaihat (sâl) forest; no particulars of these fires have been recorded in the divisional report, but it is understood that two persons believed to be implicated in one of the fires were in the hands of the police at close of the year.

59. *Buxa division.*—There were four fires over 620 acres only during the season in the area specially protected, which covers 116,002 acres, so that success was almost complete. A strip of sissu forest with heavy undergrowth (2,000 acres) in the Borojhar forest on the west of the Sâl tract in that forest was burnt departmentally to save the latter, and 40 acres in the Hill Forest block of the Buxa range, around the site of the *bathans* of the goallas who supply milk, &c., to the Buxa cantonment, was also burnt departmentally as a precautionary measure.

In the Borojhar range a fire occurred on the south boundary of the Salkuer forest; it originated in adjoining cultivation and ran over 40 acres of forest before it was put out by the forester and fire-guards: information was lodged with the police against one person, but there was not sufficient evidence to justify a prosecution.

In the Buxa range three fires occurred in the Rajabhatkawa block: one in compartment 11 over 320 acres on the left bank of the Dima river, caused either by lightning or by dropping of a cigarrette by an officer out shooting, and two in compartment 26, which burnt over 50 and 60 acres, respectivley, both of which occurred during the departmental firing of outer grass lands and were caused by a sudden change in the direction of the wind. The forest ranger, Baboo Tarak Bhramo Biswas, deserves much credit for the energy he displayed in effectually stopping the further progress of these fires.

In the Haldibari range there were two fires: one on the north boundary of the Dhampara forest burnt over 50 acres, and is believed to have been started by graziers or cultivators in Bhootan territory and crossed the frontier during the night; it was fortunately noticed in time and checked soon after it had entered the forest. The other burnt over the south block of the Mahakalguri forest, 100 acres, and was intentionally fired by a road duffadar in charge of coolies engaged in repairing the old military road from Alipore-Duar to Haldibari; he was prosecuted and fined Rs. 10.

60. *Palamow sub-division.*—The season is reported to have been a particularly dry one and five fires are stated to have occurred in the reserved forests, which burnt 3,970 acres out of the 120,389 over which special protective measures were adopted.

In the Betlah range, 500 acres of the Betlah forest are entered in the sub-divisional form No. 51 as having been burnt over, but no mention of the fire is made in the body of the report. The fire in the Kedh block of the Betlah forest, which also burnt over 500 acres, was caused by a villager firing a charcoal kiln near the north-west boundary during a high wind; this he did in contravention of the fire protection rules, and on conviction he was sentenced by the Court in March to one month's rigorous imprisonment: the area burnt is reported to be grass lands.

In the Saidope range, 1,760 acres of the Saidope forest were burnt; the fire orginated in the village forests and the offender was sentenced by the Court in April 1887 to five days' rigorous imprisonment.

In the Ramundag range, 325 acres were burnt on 15th May 1887; the fire orginated in the reserved forest and its cause has not been ascertained.

In the Kumandi range, 445 acres of the Ooreeya forest were burnt on 21st April 1887; this fire was caused by three boys cooking their food in the heart of the reserve, and they were on conviction sentenced to three days' rigorous imprisonment.

In the Southern range 440 acres of the Seemah forest were fired on 13th May 1887, caused by a traveller cooking food near the boundary; the offender was sentenced by the Court to 15 days' rigorous imprisonment.

61. *Hazaribagh sub-division.*—The whole of the Koderma reserve, 29,767 acres, was again successfully protected by special measures.

62. *Singbhoom sub-division.*—Protective measures were confined, as explained in the preliminary remarks to this section, to the 101,120 acres which it was attempted to protect during the dry season of 1886, and 45,478 acres together with 1,098 under the rules, &c., system were thus successfully protected in 1887, against 20,900 acres in 1886. The two large fires that burnt 18,000 acres of the Ankua and 17,000 of the Ambia blocks of the Saranda forest occurred on the 13th and 15th May 1887 respectively; the villagers around are reported to have turned out promptly on the call of the forest guards and rendered all the assistance in their power in attempting to check the progress of the fires, which is satisfactory. The origin of these fires in the heart of the reserve is not known, nor is that of the fire that resulted in the burning of 18,000 acres in the Leda block of the Kolhan range. Convictions were obtained in seven out of the eight cases of firing forests that were taken into Court during the year.

63. *Orissa division.*—In the Angul sub-division an attempt was again made to specially protect the whole area of the reserved forests, 179,200 acres, and 152,620 acres were successfully protected against 106,614 in the preceding season.

Two large fires in the Tikarpara range, by which 9,680 and 5,760 acres were burnt, crossed from the estates of Narsinghpur and Hindole, the boundaries between which and the reserved forests not being defined there can be no possible check on such lamentable damage occurring at any time; several fires that originated in those estates were however prevented from entering the reserves by counter firing, but when high adverse winds prevail it is impossible to successfully adopt this preventive system. The remaining area burnt in this range was caused by a local fire in the Chotokoi beat which ran over 340 acres, and by one of the fires that originated in the Bagmunda range, which spread over and burnt 1,200 acres in Saleer and Badakheta, which is much to be regretted as this is a very valuable high timber forest, centrally situated; this fire ought to have been prevented, as there is a strong staff for the protection of these forests.

There were also two large fires of 5,000 and 1,500 acres in the Bagmunda range, which originated locally.

The fires in the Tabada and Wontullia blocks of the Durgapur range, of 1,300 and 1,800 acres respectively, originated in the adjoining Athmallik estate, and being driven along by a strong wind could not be arrested till they had done all the damage possible; a similar fire that had started in Athmallik previously was successfully combated before it entered the reserved forests.

In the open forests in Angul, that are under the civil authorities, several fires took place, and one was burning for over a month; it would surely be to the interests of Government that such areas should be placed under the management of this Department.

64. In the Khorda sub-division 56,292 acres of the reserves were successfully protected by special measures out of 59,688 acres; particulars of fires over 85 acres only, in small areas, are given in the Divisional Annual Report, of which 5 acres occurred in the planted area of the Chandka block.

Convictions were obtained in the three cases of firing forests in the Angul sub-division that were prosecuted during the year.

4.—Grazing and Fencing.

65. There has been no difficulty as regards the regulation of grazing in the reseved forests during the year, and the Darjeeling and Dumsong (Teesta) grazing rules have continued to work satisfactorily though the particulars in section 2 of this chapter show that many offences against them have been detected. For the Khorda protected forests of the Orissa division, the rules passed by Government in the notification of 24th March 1886 regulated the grazing; they were however opposed to the opinions of the Deputy Magistrate of Khorda, and the rates prescribed for the grazing of outside cattle were not, as a fact, brought into force till 15th January 1887.

66. *Darjeeling sub-division.*—The graziers for the supply of milk, &c., to the stations of Darjeeling and Jalapahar, &c., allowed the year to pass without

raising any agitation as to the restrictions placed on them in the interests of the maintenance of the forests, and unlimited sheep grazing has been allowed to continue in the forests of the Singalila range, though there is not a doubt that this accounts mainly for the absence of natural regeneration of the silver fir.

The number of permits issued for grazing was:—

			Average number grazing daily.
Cows, one-month	permits, 3,086		
„ three-month	„ 221	... ...	312
Bullocks, one-month	„ 505	... ...	42
Buffaloes, three-month	„ 55	... ...	14
Sheep, „	„ 774	... ...	193

The daily averages in the number of cattle differ very slightly from those given in paragraph 52 of the report for 1885-86. The total revenue from grazing fees and sale of fodder was Rs. 3,172 compared with Rs. 2,930 in the previous year.

67. *Teesta sub-division.*—The grazing rules of the Dumsong sub-division remained in force as explained in paragraph 53 of the report for 1885-86, and the daily average number of cattle grazing was as follows:—

	Buffaloes.	Cows.	Bullocks.	Goats.	Sheep.	Ponies.	Total.
On one-month permits, at ordinary rates	21	100	...	12	...	1	134
On three-month permits, at reduced rates (Government tenants)	74	541	...	9	15	1	640
On twelve-month permits, free (33 mandals)	127	646	12	1	...	10	802
Total ...	222	1,287	12	22	15	18	1,576

The number of cattle grazed free was the same as in the previous year, but there was a falling off in cattle grazed on monthly and quarterly permits; the revenue received from grazing fees and sale of fodder fell from Rs. 1,050 to Rs. 773.

68. *Kurseong sub-division.*—The daily average number of cows for supply of milk, &c., to the Dow-Hill School that grazed in the eastern portions of compartments 6 and 7 of the Dhobijhora forest was 22, compared with 17 in the previous year; grazing was also allowed in other forests to a daily average of 24 bullocks and 1 pony. The revenue from the fees and sales of fodder was Rs. 609 against Rs. 513 in 1885-86.

69. *Julpigori division.*—Grazing was permitted by the Divisional Officer to an average daily number of 80 buffaloes and 10 cows in the Apalchand, Muraghat and Tondu forests, the revenue realized being Rs. 254 against Rs. 174 in the previous year. The divisional report contains no particulars as to the effect of this increased grazing on the forests, nor are any reasons given for allowing it.

70. *Buxa division.*—Grazing was, as usual, limited to milch cattle for the supply of the Buxa cantonment and a few carting cattle and Commissariat elephants, and the daily average was as follows:—

	Elephants.	Bullocks.	Cows.	Buffaloes.	Goats.	Total.
On one-month permits	...	64	2	153	11	210
On one-day do.	3	..	...	..	.	3

The number of milch cattle allowed to graze was increased at the request of the Officer Commanding at Buxa. In paragraph 56 of the report for 1885-86 the elephants should have been recorded as grazing on daily and not on monthly permits. The revenue from grazing fees and sale of fodder was Rs. 378 against Rs. 333 in the previous year.

71. *Palamow sub-division.*—There was no restriction on grazing in the forests, and no explanation is given as to the cause of falling off in revenue, which was Rs. 395 against Rs. 440 in 1885-86. The daily average number of cattle was.—

	Bulls.	Bullocks.	Cows.	Buffaloes.	Total.
One-month permits	3	3	104	523	633

72. *Singbhoom sub-division.*—The forests were all open to grazing, with the exception of the blocks in which special measures were adopted for protection from fire; the average daily numbers of cattle grazing were—buffaloes

669, cows 23: the revenue realized, including sale of fodder, was Rs. 252 against Rs. 260 in the previous year.

73. *Orissa division.*—The grazing in the reserved forests of this division was confined to the Angul sub-division; the following are the daily average numbers of the cattle grazed in the reserved forests, and the revenue received was Rs. 739:—

	Bullocks.	Cows.	Buffaloes.	Buffaloe calves.	Total.
On one-month permits ...	86	11	532	100	729
On six-month do.		2	11		13

In the protected forests of the Khorda sub-division revenue aggregating Rs. 108 was received for the issue of one-month permits for 81 buffaloes, 2,309 cows, and 113 calves, or a daily average of 7,192 and 9 of those animals, respectively.

74. Under the executive order of Government, issued with the notification of 24th March 1886, every occupier of a house within the Government estate of Khorda is permitted, on prepayment of an annual fee of four annas, to remove without further charge such firewood, brushwood, thatching and fodder grass, thorns for fencing, canes and bamboos as may be required for his domestic use, and also to graze all animals of which he is the *bonâ fide* owner. It may be assumed as a very liberal estimate, for purposes of calculating the value of this concession roughly, that the four annas fee does not cover the value of the privilege of grazing; the value of the grazing concession has been calculated in form No. 55 attached to this report at half the existing sanctioned grazing rates applicable to outside graziers, and on the number of cattle owned by the Khorda ryots as stated in the last published survey and settlement report of the estate, viz.:—

Bulls.	Bullocks.	Goats.	Horses and Ponies.	Cows.	Buffaloes.	Sheep.
558	58,693	8,208	216	58,280	5,773	1,822

As this report was issued some years ago, there is no doubt that the existing number of cattle is under-estimated by assuming these figures as the basis of the present calculation.

5 —Natural Reproduction.

75. Notes on this subject are recorded by all officers in their forest journals; the following which were made on an inspection of two compartments, the one closed to grazing certainly for the last 12 years and the other open for that period and perhaps for longer, exemplify the effect of grazing on natural reproduction on the hill forests of the Darjeeling district, and the impossibility of such reproduction in areas constantly grazed over in these forests unless such areas are closed for a number of years in succession to allow of the soil re-establishing itself:—

Compartment 2, Rangirum block; closed to grazing.	Compartment 3, Balasan block; open to grazing.
Aspect.—North and north-west.	South.
Slope.—Rather steep.	Rather steep.
Soil.—Fairly deep; the sub-soil clay nowhere exposed; moist, deep covering of black mould.	Shallow; the sub-soil of clay often exposed; black soil almost absent.
Surface of ground.—Vegetation of *Kibu* (a balsam) under the high forest, which protects the soil.	Generally bare of vegetation.
Stock.—Whole area covered with compact forest.	Several blanks; forest thin.
Crop.—Irregular, but complete (that is the tree-tops touch each other and completely shade the soil)	Irregular, incomplete and open (the trees are plentiful, but their tops are poor and seldom cover the ground)
All ages well represented and mixed, from big trees to seedlings, poles predominating; saplings and seedlings well represented	Trees of all ages mixed, from big trees to saplings; saplings are rare and seedlings not found.
Seedlings of kharani (*Symplocos*) and jhingni (*Eurya*) plentiful; young seedlings of Magnolia up to three years, plentiful.	Seedlings do not exist.

76. As regards the plains forests, natural reproduction, especially of sâl, is everywhere reported to continue to progress favourably where the conditions of germination exist, *e.g.*, soil not too thickly covered with matted grass, little grazing and a canopy not so heavy as to exclude the light. In the Chittagong division the Mitenga bamboo seeded profusely in April and May 1886 along both banks of the Karnafuli river and in the Sitapahar reserve, and there is now a dense crop of seedlings on every road and clearing in the forests.

6.—Artificial reproduction.

77. The work done under this head is shown in the following abstract of form No. 52:—

Division or sub-division.	On 1st April 1886.		Added during 1886-87.		On 31st March 1887.	
	Area.	Cost.	Area.	Cost.	Area.	Cost.
Regular Plantations.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
Darjeeling division—						
Darjeeling sub-division	931	38,226	98	1,542	1,029	40,768
Kurseong ditto	656	44,061	55	646	711	44,707
Julpigori division	8	230	.....	.....	8	230
Chittagong ditto	455*	47,349	61	3,007	516	50,356
Orissa division—						
Khorda sub-division	145	1,671	56	1,136	201	2,807
Total	2,190*	1,32,237	270	6,631	2,460	1,38,868
Cultural operations.						
Darjeeling division—						
Darjeeling sub-division	18	931	6	108	24	1,039
Teesta ditto	.....	10	.....	.....	.....	10
Kurseong ditto	295	4,061	.....	145	295	4,226
Buxa division	618	16,301	1	236	619	16,537
Chota Nagpore division—	.....	21	.....	70	.....	91
Palamow sub-division	.....	21	.....	28	.....	49
Hazaribagh ditto	.....	9	.....	15	.....	24
Singhbhoom ditto	.....	22	.....	22	.....	44
Orissa division—						
Angul sub-division	.....	.....	2	135	2	135
Khorda ditto	.....	.....	10	70	10	70
Total	931	21,396	19	829	950	22,225
Grand Total	3,121*	1,53,633	289	7,460	3,410	1,61,093

* Includes 40 acres omitted, see paragraph 60 of report for 1885-86.

The areas planted are thus classified:—

Division or sub-division.	Hill trees—		Teak, Tún, Sál, &c.	Conifers.	Bamboos.	Miscellaneous.	Total.
	Oak, &c.	Tún, &c.					
Regular plantations.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Darjeeling division—							
Darjeeling sub-division	509	370	.....	.....	150	.....	1,029
Kurseong ditto	23	.....	412	13	213	50	711
Julpigori division	.....	.....	8	.....	.....	.....	8
Chittagong ditto	.....	.....	509	.....	.....	7	516
Orissa division—							
Khorda sub-division	.....	.....	201	.....	.....	.....	201
Total	532	370	1,125	13	363	57	2,460
Cultural operations.							
Darjeeling division—							
Darjeeling sub-division	24	.....	.....	.....	.....	.....	24
Kurseong ditto	210	.....	76	.....	1	8	295
Buxa division	.....	.....	618	.....	.....	1	619
Orissa division—							
Angul sub-division	.....	.....	2	.....	.....	.....	2
Khorda ditto	.....	.....	10	.....	.....	.....	10
Total	234	.....	706	.....	1	9	950
Grand Total	766	370	1,831	13	364	66	3,410

78. The extensions under regular plantations cover 270 acres, and under cultural operations 19 acres; the total cost under the head including the up-keep of old plantations and the formation of nurseries was Rs. 7,460. The average cost per acre of the extensions was Rs. 26, and the total cost per acre of the area operated on up to the close of the year is Rs. 47 against Rs. 49 at the close of 1885-86.

As regards the remark recorded in paragraph 60 of last year's report on the reputed failure of the planting work on Barunai Hill in Orissa, the result of a counting of plants alive on 31st March 1887 on the 77 acres showed that nearly 50 per cent. had survived; this result, at the close of a very dry season, justifies the retention of the area in the statement of plantations.

79. *Darjeeling sub-division.*—The regular plantations were extended by 48 acres in the Dooteria and 50 in the Poomong blocks; on the former 19,365 seedlings were planted out, chiefly buk, champ and pipli, and 22,056 on

the latter, chiefly tún: vacancies in former areas were filled up with 6,463 and 4,431 plants respectively, and the result of these operations is satisfactory.

Under cultural operations six acres of blanks in the Sepoydhura block were planted up.

The up-keep of old plantations under both heads cost	...	...	...	Rs. 690, or annas 10 per acre,
and extensions of the year, with nurseries	„	...	...	„ 1,830, or Rs. 13 „
			Total	... Rs. 1,950

80. *Kurseong sub-division.*—There was an extension of 55 acres to the regular plantations; 1 acre India-rubber in Bamonpokri block, 2 acres mango and jack in Chamta block, compartment 1, and 52 acres bamboos in Adalpur block, compartment 2, all of which are doing well. The cost of the extensions, with nurseries, was Rs. 467, or Rs. 8 per acre, and the up-keep of old areas Rs. 324, or seven annas per acre.

81. *Buxa division.*—One acre in the Rajabhatkawa block, compartment 15, was planted out with about 900 Mahogany seedlings; these had to contend from the very outset with the attacks of insects and field rats, and several were badly nipped by the frost of 10th February. At the close of the year 303 Mahogany plants only were alive, and blanks in the plantation were filled up with jack, mango and sâl. The cost of this plantation was Rs. 213, and Rs. 23 were expended in weeding and cleaning the area formerly planted in compartment 21 of the same block.

82. *Chota Nagpore division.*—An expenditure of Rs. 208 was incurred at head quarters and in the three sub-divisions on the experimental cultivation of Mahogany, which was practically a failure, 401 plants only being alive at the close of the year.

83. *Chittagong division.*—The Sitapahar plantations were extended by 61 acres, of which 54 acres were planted up at Kukighat with teak and tún in lines 12 feet wide with four lines 24 feet in breadth dividing the area into three equal strips; the season was an exceptionally dry one, 3·8 inches of rain only having fallen at Sitapahar from 1st October to 28th February, and several of the teak transplants died down to the ground: many will however throw out fresh shoots next rains. At Fakirchur seven acres were cleared in 15 feet lines and planted up with Mahogany, sissoo and paper-mulberry, which are doing well. No particulars of the expenditure under head "Sowing and planting," which amounted to Rs. 3,007, is given in the divisional report.

84. *Orissa division.*—In the Khorda sub-division the Barunai Hill plantation was extended by 56 acres, in lines 10 feet broad, on which 24,791 teak and 334 Mahogany plants were put out in July and August. Of these 16,918 were alive and doing well on 31st March 1887, and of former years' work 67 per cent. of 1884-85 and nearly 50 per cent of 1885-86 on Barunai Hill were alive on that date. Blanks in these areas will be filled up in the rains of 1887. The cost of this work and of keeping up the Chandmari plantation and nurseries and clearing former years' plantations was Rs. 1,136.

Ten acres of blanks in the Chandka block were planted up with teak, tún, and sâl at a cost of Rs. 70. Half of this area was destroyed by fire as noticed in paragraph 64 above.

In the Angul sub-division an attempt was made at a cost of Rs. 128 to plant up 78 acres of blanks around Bichunda Bhogra, in the Bagmunda range; seed of different indigenous species was sown at stake in lines 25 feet apart: it was found that many were washed out of the ground, and a nursery was then started from which and the forests 25,102 transplants were put out in the lines, and about 10,000 seeds were sown at stake. The plants were doing well when inspected by the Divisional Officer, but the Sub-divisional Officer reported that on 31st March 2,416 plants only survived.

Two acres around the Tikarpara station site were planted out from nurseries, chiefly with mango, at a cost of Rs. 7.

7.—Cutting of Creepers, cleanings and early thinnings.

85. Work under this head has been almost entirely confined to the cutting of creepers, which was carried out in 11,915 acres only, of which 7,051 are in the Buxa division. This was neglected altogether in the Julpigori division, and in the Chota Nagpore division the establishments, being employed chiefly on settlement and demarcation, were unable to find time to supervise this work.

In the Orissa division a start has been made in cleanings in the Dandimal forest of the Khorda sub-division, the results of which on the forest growth are reported to be already apparent.

86. *Teesta sub-division.*—The work of cutting creepers was continued in the sâl forests of the Chel range; it was completed in the Leesh block, where 1,150 acres were cut over, and was commenced by the clearing of 350 acres in the Churonthi block. The cost was Rs. 117, or 1 anna 3 pies per acre.

87 *Kurseong sub-division.*—In the Terai range 800 acres of the Tukriajhar forest, and 682 acres of the Rishabari and 526 of the Bagdogra blocks of the Dalkajhar forest, were cleared of creepers, as were also compartment 4 (165 acres) of the Rungdung block, and half (372 acres) of the Kuklong block of the Sukna forest, in accordance with the provisions of the Working Plan. The total cost of this work was Rs. 239, or under 1½ annas per acre.

88. *Julpigori division.*—A sum of Rs. 200 was provided in the budget, and in the plan of operations it was laid down that creepers should be cut over, as far as funds would allow, in the Apalchand and Tondu ranges; nothing however was done during the year.

89. *Buxa division.*—Creepers were cut in the following areas:—Borojhar range, Borojhar block, north-west portion of sâl tract, 1,280 acres; Buxa range, Poro block, compartments 11, 12 and 14, 886, 1,230 and 960 acres respectively; and Rajabhatkawa block, part compartments 13 and 14, 547 and 963 acres respectively; Haldibari range, Raidak forest, south portion, 2,500 acres, and Mahakalguri forest, 215 acres; total 9,581 acres. The cost was Rs. 248, or 5 pies per acre, but of this amount Rs. 130 only was paid and charged during the year under report.

90 *Chittagong division* —Rupees 152 were expended on clearing 624 acres of creepers in the reserved forest. The Divisional Officer reports that creepers are very numerous in the Kassalong and Rinkheong forests, and that the difficulty in procuring labour is the great obstacle to all works of improvement in the remoter reserves.

91. *Orissa division.*—In the Angul sub-division 117 cart-loads of creepers were cut and removed (on payment) for lashing rafts, and in the Khorda sub-division 480 acres (compartment 2) of the Chandka block, and 87 acres (compartment 1) of the Churang block, Dandimal forest, were cleared of all creepers, thorny plants and useless trees, the contractor being allowed to remove the same at half the usual rates for firewood, instead of being paid for the work done.

8.—Experiments and Exotic Trees.

92. The result of these was as follows:—

Kurseong sub-division.—Of the 203 Mahogany seedlings mentioned in appendix D of last year's report, 113 that survived the winter were put out along the Sukna-Mahanadi road, but at the close of the year 50 only survived, and these were not particularly healthy.

Buxa division.—The particulars regarding the Mahogany plants are given in section 6 of this report, as also regarding those planted in the *Chota Nagpore*, *Chittagong* and *Orissa divisions.*

9.—Communications and Buildings.

93. The chief work during the year in opening out export roads was in the Hazaribagh and Singbhoom sub-divisions and in the Orissa division. In the Teesta sub-division the repairs were not carried out as thoroughly or to the extent anticipated, nor were they in the Kurseong sub-division; while in the Palamow sub-division the work of construction was grossly neglected, Rs. 207 only having been expended out of Rs. 1,200 provided in the revised estimate, the detail of the manner in which the whole amount was to be laid out having been prescribed in the sanctioned plan of operations. Work on roads in the Singbhoom sub-division was specially curtailed owing to settlement and survey operations, but sanction has been accorded to detailed estimates since the close of the year under report for the expenditure of the Rs. 10,000 provided in the budget for 1887-88 on roads to open out the Singbhoom forests.

94. The work done on export roads and inspection paths was as follows :—

Division.	New lines opened.		Existing lines repaired.		Cost.	
	Export roads.	Inspection paths.	Export roads.	Inspection paths.	New works.	Repairs.
	Miles.	Miles.	Miles.	Miles.	Rs.	Rs.
Darjeeling sub-division ...	.....	1·7	3·4	23·1	55	1,285
Teesta ditto ...	.....	... ..	.....	48.	.....	618
Kurseong ditto ...	.....	.....	14·	33·5	.....	397
Julpigori division ...	.....	.....	40·5	28·	.....	705
Buxa ditto ...	.....	12·	13·	67·	145	344
Palamow sub-division ...	1·5	.....	7·	.....	182	75
Hazaribagh ditto ...	8·5	.....	27·	2·	491	200
Singbhoom ditto ...	8·	.....	74·	14·	691	600
Chittagong division ...	... .	.....	.....	5·	.....	379
Orissa ditto ...	4·9	.....	15·	.....	181	140
Total ...	22·9	13·7	199·9	225·6	1,635	4,833

The heavy expenditure on repairs in the Darjeeling sub-division was due to those necessary on the Goompahar cart road, the rometalling of parts of which cost Rs. 907. The further extension of this road from Chitaidhura to Lepcha Jagat, about 1·5 miles, was undertaken by the Public Works Department on an estimate of Rs. 10,035, but the completion report has not yet been received.

The expenditure shown above includes the construction and repairs of bridges, which have been maintained in working order, but in the Orissa division eight miles of road, repaired in the Angul sub-division at a cost of Rs. 9-12 per mile, are included in the above table, though payment for the work was not made during the year under report.

95. The particulars of the new lines opened are :—

In the Darjeeling sub-division, 1·7 miles of inspection paths in the Mahalderam and Tukdah ranges, and 12 miles in the Borojhar range of the Buxa division; in the Palamow sub-division, 1·5 miles of fair-weather carting road was constructed from Kedh to Gorhee, in continuation of the Gaddee-Kedh road; in the Hazaribagh sub-division, roads practicable for country carts were constructed from Taraghuttee to Meghaturree, 4 miles, and from Bhundadera to Baratand, 4·5 miles, in the Koderma reserve; in the Singbhoom sub-division a similar road, 8 miles, was constructed in the Porahat range from Bandgaon to Kutipiri; and in the Orissa division the following carting roads were constructed:—Angul sub-division, Bagmunda-Puruncote road extended by 1·3 miles, Bagmunda-Bichundabhogra road opened 2·4 miles; Khorda sub-division, from Simlipatna to the boundary of the Chandka block, 1·2 miles.

96. The work done in construction and repairs to buildings is summarized below. The expenditure charged to this head in the Kurseong sub-division includes an item of Rs. 135, the price of coir matting for the head-quarters' bungalow, which was purchased without authority, and which should not, in the Conservator's opinion, have been debited to "buildings."

In the Palamow sub-division work under this head was sadly neglected. Rupees 3,500 were provided in the estimates, and details of work to this amount were sanctioned in the plan of operations: Rupees 1,221 only were expended, and the important buildings at Dehree-on-Sone for the bamboo depôt remained absolutely untouched.

	Cost.	Total.
	Rs.	Rs.
Darjeeling sub-division—		
Completion Tukdah range, head-quarters' house	250	
Part cost inspection bungalow at Pachim, Senchal range	753	
Erection charcoal sheds, Goompahar range ...	444	
Ditto Forester's rest-houses at Lepcha Jagat, Sepoydhura, Manibhanjan and Rishap ...	170	
Erection 16 guards' huts	100	
Repairs to all buildings	988	
Pay of bungalow chowkidars	120	
		2,825
Teesta sub-division—		
Construction Chel ranger's house at Chunbatti	525	
Ditto five inspection huts	74	
Ditto guard's hut at Taren	10	
Repairs to buildings at head-quarters	851	
Ditto ditto in ranges	187	
Pay of bungalow chowkidars	167	
		1,814

	Cost.	Total.
	Rs.	Rs.
Kurseong sub-division—		
Building 16 guards' huts	160	
Repairs to buildings at head-quarters	480	
Ditto ditto in ranges	464	
Pay of bungalow chowkidars	576	
		1,630
Julpigori division—		
Building an office at head-quarters, part payment	681	
Repairs to buildings at head-quarters	99	
Ditto ditto in ranges	249	
		1,029
Buxa division—		
Purchase Alipur-Duar inspection bungalow ...	350	
Construction Borojhar range house	180	
Ditto Kaunia depôt office	45	
Ditto stables at Rajabhatkawa	18	
Ditto Jamjuri guard's hut	10	
Repairs to buildings at head-quarters	412	
Ditto ditto in ranges and depôts ...	636	
		1,651

	Cost.	Total.
	Rs.	Rs.
Palamow sub-division—		
Construction Betlah and Southern range houses at Betlah and Maromand ...	290	
Construction in part Ramandag do at Lat ..	76	
Ditto cook-room and stable, Betlah inspection bungalow ..	7	
Ditto eight guards' huts, Betlah and Southern ranges	200	
Collection materials for Betlah and Southern ranges at Kattuyah, Kumandi range ...	5	
Repairs to buildings at head-quarters	432	
Ditto to rest-houses in ranges	212	
		1,221
Hazaribagh sub-division—		
Repairs to buildings at head-quarters	111	
Ditto to guard's houses in forest	73	
		184
Singhbhoom sub-division—		
Construction depôt house, Chyebassa, and guard's house, Horhap ...	98	
Rest-houses at Sagjor and at Samta and Monerpur, Saranda range, completed	343	
Elephant shed at Borkela commenced	4	
Repairs to buildings at head-quarters	319	
Ditto ditto in ranges	146	
Pay of bungalow chowkidars	100	
		1,003

	Cost.	Total
	Rs.	Rs
Sunderbuns division—		
Erection of station houses at Halderkhali, Cassecabad, Sipsha and Baniakhali, completed	147	
Erection of new station house at Khulna commenced	360	
Removal Hultoca station house to Supati, re-erection nearly completed	176	
Erection of cookshed, &c., at stations	116	
Repairs to station buildings	541	
		1,230
Chittagong division—		
Erection houses and out-offices at Revenue stations and Chittagong depôt ...	809	
Erection of coolie lines, &c., at Kaptai ...	190	
Repairs to buildings at head-quarters	604	
Ditto ditto in ranges	850	
		2,343
Orissa division—		
Repairs to buildings, Angul sub-division ...	82	
Ditto ditto, Khorda ditto ...	36	
		118
Total charges under A—VIIb, "Buildings" ..		14,998

The charges for repairs to buildings in most of the divisions and sub-divisions are high, which is due to this work having been generally allowed to stand over from 1885-86, when expenditure was kept as low as possible.

97. In the Sunderbuns division Rs. 398 were expended on keeping bunds round station houses in order, and in some cases in re-erecting them, and Rs. 543 on the construction of two new boats and ten dinghies, while the repairs to station boats and dinghies cost Rs. 731. The repairs to the steamer *Cygnet*, charged during the year, cost Rs. 851, and the new steamer *Seal* was launched from the Kidderpore Dockyard on 30th December 1886: the expenditure incurred on her construction and fittings by the Dockyard authorities—the whole of which was not however debited in the accounts of this Department for 1886-87—is understood to have been Rs. 33,498-7-8.

CHAPTER IV.—YIELD AND WORKING.

1.—Departmental Operations.

98. From the form No. 53 attached to this report it will be observed that the number of trees felled by Government agency, under "Selection fellings," compare thus with the work under this head in the two previous years:—

	1886-87.	1885-86.	1884-85.
Sâl trees	2,750	1,774	2,924
Other plains trees	66	38	617
Hill trees	94	827	1,145
Total ...	2,910	2,639	4,686

As regards sâl trees, the increase is in the Buxa division, where these have been felled in advance of the working plan to meet an indent for sleepers from the Northern Bengal State Railway, and to allow logs to season for future sales. The decrease shown in hill trees is due to the method of record required by the present code rules, and the trees enumerated in form No. 53 are those felled for scantling, as distinct from firewood and charcoal.

99. The following is a summary taken from forms Nos. 54 and 55 of the out-turn under this head. The figures include confiscated, drift and waif wood and forest produce:—

	Selection fellings.	Clearances.	Thinnings.	Total wood.	Bamboos.	Minor forest produce.
	C. ft. solid.	C. ft. solid.	C. ft. solid.	C. ft. solid.	No.	Maunds.
Reserved forests—						
Timber	106,321	12,967	.....	119,288	.....	.....
Fuel	64,501	15,393	224,233	304,127	.....	.. ..
Total ...	170,822	28,360	224,233	423,415	722,384	11
Protected forests—						
Timber	.....	16	.....	16	.....	.....
Fuel	.....	.....	... ..	... .	...	. ..
Total	.....	16	.....	16	.....	1
Unclassed State forests and waste lands—						
Timber ...	6,784	.. ...	.....	6,78	.....	.....
Fuel	128	... .	...	128	.....	.....
Total ...	6,912	...	.....	6,912	1,940	.....
Total departmental operations	177,734	28,376	224,233	430,343	724,32	12

The total out-turn of wood was 430,343 cubic feet solid, of which 126,088 was in timber and 304,255 in firewood and charcoal, against 247,663 in the preceding year, comprising 87,365 cubic feet timber and 160,298 fuel. The chief increase in timber was in the Buxa division, to meet the railway requirements in sleepers, and in fuel in the Darjeeling sub-division, where the indents of the Military Department were, as anticipated, heavier than in 1885-86. The decrease in the number of bamboos (724,324 against 1,012,835) was due to faulty arrangements in the Palamow sub-division.

100. The particulars of stocks in sale depôts are given in form No. 56, and the comparative value of the balances on hand in the several divisions, which is Rs. 28,904 against the year, is recorded in form No. 57A.

101. *Darjeeling sub-division.*—The work in timber was limited to the cutting and removal of 10,980 cubic feet for use in departmental buildings, and 267,885 cubic feet solid wood removed in firewood and charcoal, against 153,617 in the previous year. The work was carried on under the provisions of the working plan of 1882, and a reserve stock of fuel was maintained as therein required, which consisted at the close of the year of 22,660 maunds firewood and 5,113 maunds charcoal at sale depôts, and 29,214 maunds firewood at forest depôts conveniently situated for transfer to Darjeeling as required, the object being to prevent scarcity and the undue raising of prices by private dealers.

The fuel removed departmentally from the forests consisted of—

Firewood, 62,445 maunds, estimated to equal	...	...	109,279 c. ft. solid wood.
Charcoal, 22,658 „ „ „	...	...	158,606 do. do.
	Total	...	267,885 do. do.

102. The receipts and disposals in sale depôts were:—

	Receipts.	Sales.
Timber	.....	268 pieces=605 c. ft.
	Mds.	Mds.
Firewood	73,133	73,998
Charcoal	21,279	17,533

and the demand of public departments and the general public on the stocks of fuel in sale depôts was:—

	Firewood.	Charcoal.
	Mds.	Mds.
Commissariat Department	55,000	.....
Public Works ditto	.....	285
Jail ditto	90	.....
Total Public Departments	55,090	285
General public	18,908	17,248
Total sales from sale depôts ...	73,998	17,533

103. The requirements of the Commissariat Department rose from 28,000 to 55,000 maunds in firewood in the year, and those of the general public were 18,908 against 19,706 in the preceding year; the demand for charcoal, which was in the two previous years 5,678 and 10,919 maunds respectively, again increased to 17,533 maunds, owing to private dealers having withdrawn to a great extent from the trade, which they found unremunerative at the price (Re. 1 per maund) in force at the departmental depôts.

104. *Teesta sub-division.*—The out-turn of the 37 trees felled by the department was 3,915 cubic feet timber: 556 sâl sleepers, the out-turn of former years' fellings, were brought on stock, and 325 cubic feet drift and dry wood were also worked out during the year. The transactions in sale depôts, excluding 19 cubic feet received by remeasurement and 112 used by the department, were:—

	Receipts.	Sales.	Balance at close of year.
	C. ft.	C. ft.	C. ft.
Timber	788	3,695	3,212

The sales include 1,742 sleepers = 2,322 cubic feet made over chiefly to the State Railway Department.

105. It may here be noted that the only information recorded in the sub-divisional report submitted by Mr. Grant (which was rewritten in full by

the Divisional Officer for submission to the Conservator) under head Chapter IV is contained in the following words:—"No trees were felled by departmental agency, except those shown in form 53, but Rs. 4,015-4 was realized from scantlings and sleepers prepared in former years—*vide* form No. 54."

106. *Kurseong sub-division.*—The timber worked out by the department, including the out-turn of 9 trees felled, was 3,027 cubic feet, of which 292 cubic feet were drift wood, to which a claim was preferred and thrown out by the Civil Court: 9,538 cubic feet wood were also worked out departmentally in 5,450 maunds firewood. The sales from depôts were 3 logs = 111 cubic feet only, and 3,000 maunds firewood were sold locally in the forests.

107. *Julpigori division.*—The trees felled were 137 in number, of which 30 were dry sâl poles, and the timber worked out departmentally consisted of 3,894 cubic feet from the forests and 2,623 cubic feet drift; 2,362 cubic feet (=1,350 maunds) drift firewood were also collected by the department. The sale depôt transactions in timber were:—Receipts, 3,694 cubic feet; sales, 5,630, which include 1,300 sleepers=1,733 cubic feet sold chiefly to the State Railways: and in fuel, receipts, 624 maunds; sales, 1,420 maunds.

108. *Buxa division.*—The department felled 1,810 sâl trees, of which the out-turn was 74,562 cubic feet, and 1,458 cubic feet dry timber were also worked out by the department, or in all 76,020 cubic feet timber against 46,959 in the previous year. The sale depôt transactions were:—

	Receipts.		Sales.	
	No.	C. ft.	No.	C. ft.
Timber in log	.....	.....	380	12,020
Sleepers, metre gauge	14,517	19,321	15,549	20,730
Do., tramway	7,819	7,819	10,575	10,575
Scantling	647	1,352	2,059	2,836

The sales include 18,570 sleepers to the Northern Bengal State Railway authorities at Mogulhât and Kaunia, where the rejections on stock at the close of the year, representing a cash outlay of over Rs 10,000 to this Department in sawing and carriage, numbered 12,787. Since the close of the year about half of these have been taken over by the railway, and of the balance some have been sawn up for fencing posts and others sold to native dealers.

109. The transactions of the year with the Railway authorities have been very unsatisfactory—firstly, as to rates, which this Department was induced to lower on information received officially as to the cost to the railway of sleepers delivered from Assam at Kaunia by a native contractor, which have since been admitted to be incorrect; and secondly as to wholesale rejections without inspection on the ground that sleepers had been sawn from green timber. The indent having been received and accepted by this Department in May 1886 and the only previous intimation as to probable requirements contained in a letter from the Manager of 28th May 1885, in which he stated that the stock then in his hands was more than could be possibly used on the line till after 1886-87, it was natural that, as explained in the acceptance, a portion only of the sleepers could be of seasoned wood. Endeavours will be made to avert such loss as has resulted from sleeper transactions in 1886-87 by working all supplies to the Railway department through contractors in future. This Department would have been a gainer had it sold in log all the timber converted into sleepers during the year at less than one anna a cubic foot.

110. *Palamow sub-division.*—The number of bamboos brought to depôts was 470,007 only, of which 403,075 were sold during the year. Three maunds of lac were also collected dedartmentally and sold.

111. *Singbhoom sub-division.*—The trees and poles felled by the department numbered 862, the out-turn in timber being 5,061 cubic feet and in fuel 20,748 cubic feet: 140 bamboos, a little lac, 8 maunds Sabai grass, and 19,870 silk cocoons were also collected. The sales from depôts were 2,462 cubic feet timber and 6,799 maunds (=12,565 cubic feet wood) of fuel, as well as 140 confiscated bamboos and the other minor produce collected.

112 *Sunderbuns division.*—In the reserved forests, drift and confiscated timber aggregating in volume 2,393 cubic feet, and 101 cubic feet fuel was collected departmentally, and the sales from depôts and locally consisted of

97 logs and posts=763 cubic feet and 1 boat and 58 maunds firewood. There were no departmental transactions in the protected forests.

113. *Chittagong division.*—Jarul timber, 830 cubic feet, was brought out departmentally during the year, and with this exception there were no transactions in the reserved forests. From the Unclassed State forests 6,784 cubic feet timber, 128 cubic feet firewood, and 1,940 bamboos were collected in drift operations. The receipts in sale depôts were—timber, 15,457 cubic feet; fuel, 98 maunds; bamboos, 4,940: and the sales—timber, 14,323 cubic feet; fuel, 73 maunds; bamboos, 3,300.

114. *Orissa division.*—Departmental operations in timber were confined to the removal of dead wood from the Angul reserves, of which 9,220 cubic feet sâl were worked out; 3,493 cubic feet wood were brought out as fuel, and 105,965 bamboos, of which 420 were removed from the Khorda reserves.

From the protected forests 16 cubic feet dry sâl posts were removed by the department, and two elephant tusks, weighing 34 seers, were found and sold.

The transactions in sale depôts were: receipts—timber, 12,082 cubic feet; bamboos, 105,545: sales—timber, 4,199 cubic feet; bamboos, 94,900.

2.—Removal of Produce by Purchasers.

115. The timber and other produce removed under this head is abstracted as follows from the returns in forms Nos. 54 and 55. The figures include drift and waif wood and produce:—

	Selection fellings.	Clearances.	Thinnings.	Total wood.	Bamboos.	Minor forest produce.
	C. ft. solid.	C. ft. solid.	C. ft. solid.	C. ft. solid.	No.	Mds.
Reserved forests—						
Timber	6,329,764	28,842	.....	6,358,606	.....	.....
Fuel	9,882,648	125,441	311,850	10,317,939	.....	.....
Total ...	16,212,412	152,283	311,850	16,676,545	5,267,381	41,45,229
Protected forests—						
Timber	342,465	1,352	.....	343,837	.....	.....
Fuel	652,806	6,039,026	.....	6,691,832	.....	.....
Total ...	995,291	6,040,378	.....	7,035,669	553,840	8,45,676
Unclassed State forests and waste lands—						
Timber	239,473	.....	.....	239,473	.....	.....
Fuel	89,653	.....	.....	89,653	.....	.....
Total ...	329,126	.....	.....	329,126	11,419,439	1,77,960
Total removed by purchasers in 1886-87	17,536,829	6,192,661	311,850	24,041,340	17,240,660	51,68,865
Removed in 1885-86 (corrected figures) { Timber ... / Fuel ...	.....	.....	.....	6,488,735 / 18,509,073	.....	.....
Total removed by purchasers in 1885-86	.....	.....	.....	25,097,408	15,637,584	52,11,009
Difference in 1886-87 ... ... { More ... / Less ...	.....	.....	.....	..... / 1,056,068	1,603,076 /	..... / 42,144

These differences, explained in the following details regarding the several divisions and sub-divisions, amount to an increase in timber of 453,181 cubic feet, and a decrease in fuel of 1,499,249 cubic feet, as compared with the previous year. These are accounted for, with minor fluctuations in other divisions, in the figures below under the Sunderbuns division. The increase of 1,603,076 bamboos is accounted for in the Chittagong forests, where there was a large increase of over two millions in the reserves and a decrease in the Unclassed, &c, forests, due to men declining to enter the forests for fear of Kuki raids; there was also a heavy decrease in the Palamow forests. The decrease under minor produce is 42,144 maunds; the increase in most divisions is more than counterbalanced by the falling off in the Chittagong Division.

116. *Darjeeling sub-division.*—The produce removed by permit-holders was:—

	Mds.	C. ft. wood.
Timber	.....	62,198
Firewood	1,20,08	= 307,184
Charcoal	13,863	
Total ...		370,382

showing an increase of timber of about 5,000 cubic feet, and a decrease of about the same quantity in fuel as compared with the previous year. The revenue from bamboos and minor produce was Rs. 301 and Rs. 206, against Rs. 300 and Rs. 182 in 1885-86.

117. *Teesta sub-division.*—The removals by permit-holders were:—

	Mds.	C. ft. wood.
Timber	.....	79,453
Firewood	47,704 } =	132,727
Charcoal	7,321 }	
Total ...		212,180

the increase in timber being 33,345 and in fuel 50,141 cubic feet over the demand for 1885-86, chiefly for use on tea estates. The receipts by sale of bamboos and minor produce were Rs. 702 and Rs. 145, against Rs. 793 and Rs. 134 in the preceding year.

118. *Kurseong sub-division.*—The following was removed by permit-holders:—

	Mds.	C. ft. wood.
Timber	.....	86,946
Firewood	86,208 =	150,864
Total ...		237,810

being a decrease of 2,156 cubic feet under timber, partly owing to increased exports from Nepal, and an increase of 47,296 cubic feet under firewood, for which there was a greater demand on the forests near tea gardens than could be supplied. Bamboos, for which the demand has also increased, realized Rs. 1,240 and minor produce Rs. 455, against Rs. 934 and Rs. 512 in 1885-86.

The Superintendent of the Gunpowder Factory at Ishapore obtained a small sample (14 maunds) of Alder wood, to experiment on its charcoal for use in his works.

119. *Julpigori division.*—Permit-holders removed the following:—

	Mds.	C. ft. wood.
Timber	.....	25,203
Firewood	53,423 =	93,490
Total ...		118,693

being 2,796 cubic feet less than in the previous year. Of this 5,700 cubic feet timber and 31,696 cubic feet fuel were drift wood. The receipts from bamboos and minor produce were Rs. 4 and Rs. 155, only, against Rs. 11 and Rs. 234 respectively in 1885-86.

120. *Buxa division.*—There has been an increase in demand for timber owing, it is believed, to the illicit felling of trees in the forests under the civil authorities along the foot of the hills, which used to be brought to market as the produce of the Bhootan forests, having been put a stop to. Up to August 1886, when the fraud was discovered, 10,822 cubic feet of so-called Bhootan timber had passed down to market, but since that month none has arrived. The following wood was removed by permit-holders:—

	Mds.	C. ft. wood.
Timber	.....	16,980
Firewood	3,073 =	5,372
Total ...		22,352

against 9,466 cubic feet in 1885-86. The revenue from bamboos and minor produce was Rs. 29 and Rs. 95, against Rs. 10 and Rs. 44 in the preceding year.

121. *Palamow sub-division.*—The number of bamboos sold on permit fell from 973,000 to 157,802 only—a smaller out-turn than in any year since 1881-82; Rs. 476 only were realized by their sale against Rs. 1,235 in 1885-86, and the revenue from minor produce was Rs. 118 against Rs. 126. The

Conservator is not at all satisfied with the manner in which the sub-division has been worked, and regrets that he has no officer at present available to relieve Mr. Mendes of his charge.

122 *Hazaribagh sub-division.*—Permit-holders removed 2,062 cubic feet timber and 8,050 cubic feet firewood from the Koderma reserve during the year, against 258 cubic feet in all in 1885-86, and the revenue from bamboos and minor produce was Rs. 112 and Rs. 241 against Rs. 119 and Rs. 414 in the previous year. Rupees 285 however on account of rent of mica mines ought to have been credited as revenue from minor produce during the year under report instead of under "miscellaneous" revenue.

123. *Singbhoom sub-division.*—Trees and poles containing 4,678 cubic feet, beams and slabs of 208 cubic feet, and firewood and charcoal, representing 8,082 cubic feet, were removed by permit-holders, showing a considerable increase over the previous year: 32,035 bamboos against 10,483 in 1885-86 were also sold, and the revenue from minor forest produce rose from Rs. 93 to Rs. 239.

124. *Sunderbuns division, Reserved Forests.*—The demand for all kinds of timber and produce, except firewood and wax and honey, was greater than in the previous year In the notification of 9th March 1886 the rate for sundri firewood was raised from 3 to 6 pies per maund with effect from 1st April 1886 with the view to saving saplings of that tree, which is the only one in the Sunderbuns forests that produces really valuable timber, from being ruthlessly cut for firewood, whereas there are several other species of no market value as timber that yield excellent fuel. The wood-cutters prefer the sundri poles for firewood as they grow with straight stems and are more easily handled and pack closer in loading the boats than other poles, but from an economic point of view their use as fuel is much to be deprecated.

125. The timber and produce removed from the reserved forests compare as follows with the preceding year:—

		Timber.	Firewood.	Minor produce.
		C. ft.	C. ft.	Mds.
1886-87	... ...	6 079,778	9,540,924	3,972,490
1885-86	.. ..	5,736,696	12,662,338	3,566,769
In 1886-87	... More	343,082	.....	405,721
	... Less	.....	3,121,414	.....

Of the firewood removed during the year under report, 3,655,407 cubic feet were of sundri and 5,885,517 of other woods. The number of right-of-way passes issued fell from 5,332 to 3,509, and the revenue from this source from Rs. 5,699 to Rs. 4,094, owing to the out-turn from private lands near the reserves being less than in former years. There were 14 boats registered against two in the previous year.

126. *Sunderbuns division, Protected Forests.*—The following is a comparison of quantities removed by permit-holders with the previous year's figures:—

		Timber.	Firewood.	Minor produce.
		C. ft.	C. ft.	Mds.
1886-87	... ...	342,485	652,806	288,286
1885-86	... ...	191,814	670,147	253,454
In 1886-87	More	150,671	.....	34,832
	Less	.....	17,341	.....

The firewood removed in 1886-87 consisted of 17,836 cubic feet of sundri and 634,970 of other woods. There was an increase over the previous year (2,795 against 2,693) in the number of right-of-way passes issued, the revenue from which rose from Rs. 2,512 to Rs. 3,589, while there was a decrease of 106 in the number of boats registered.

127. *Chittagong division, Reserved Forests.*—The timber removed by permit-holders was 980 cubic feet, and 4,143,327 bamboos were also removed against 1,861,507 in the preceding year, the minor produce having increased from 4,359 to 6,584 maunds.

128. *Chittagong division, Unclassed State Forests and Waste Lands.*—Timber aggregating 239,473 cubic feet and firewood 89,653 cubic feet was removed as compared with 333,642 and 173,688 cubic feet respectively of the previous year. The number of bamboos was 11,419,439 against 12,102,215 (incorrectly

shown as 10,822,940 in form No. 55 for 1885 86, where the number of Dolu bamboos is entered as 8,573,583 instead of 857,858), and there was also a falling off in the quantity of minor produce removed.

The receipts from bamboos were Rs. 29,079, after deducting Rs. 7,746, the Maharajah of Hill Tipperah's share, against Rs. 33,821 in the previous year, and from minor produce Rs. 7,696 against Rs. 11,800, after making similar deductions.

129. *Orissa division.*—From the reserved forests 120 cubic feet timber only were removed by permit-holders, and 71,246 cubic feet of firewood, against 497 and 2,562 cubic feet respectively in the previous year; while the number of bamboos was 635,737, with a revenue of Rs. 1,649 against 463,300 and Rs. 1,159, showing a considerable increase in demand. Minor produce realised Rs. 209 against Rs. 103 in the preceding year.

From the protected forests 902 cubic feet timber and 6,039,026 cubic feet fuel were removed, the figures for 1885-86 being 3,616 and 4,534,440 respectively: 553,840 bamboos were removed against 640,680 with a revenue of Rs. 1,295 as compared with Rs. 1,999 in the previous year, and the revenue from minor produce rose from Rs. 2,212 to Rs. 2,903.

3.—Free Grants of Forest Produce.

130. These amounted to the following quantities, as shown in forms Nos. 54 and 55:—

From the reserved forests.—1,483 cubic feet timber and 11,007 cubic feet fuel, the out-turn of selection fellings; 500 bamboos, and 5,140 maunds of minor forest produce;

From the protected forests.—920 cubic feet timber, the out-turn of clearances: 8,480 bamboos, and 27,300 maunds of minor produce;

or a total of 2,403 cubic feet timber, 11,007 cubic feet fuel, 8,980 bamboos, and 32,440 maunds of minor produce, together with grazing concessions to the value of Rs. 1,03,035.

131. The 2,403 cubic feet under timber, which may be estimated at Rs. 801 in value, is thus accounted for. In the Buxa division, 800 cubic feet of dry sâl and sissu poles were granted to several mandals for assistance rendered in procuring labour, and 318 cubic feet sâl timber (which cost the department in sawing and carriage Rs. 452) was made over for use on the Alipore-Buxa Military road bridges to the Public Works Department, in accordance with Government orders. In Singbhoom 365 cubic feet sâl poles were granted free for the construction of a school-house. In Chittagong the Deputy Commissioner of the Hill Tracts has ordered the free grant of 10 boats to the Bomong of Bunderbun, but their contents or value are not yet known. In Orissa 920 cubic feet poles were given to residents on the Khorda estate to rebuild their houses after a fire.

The 11,007 cubic feet under fuel, which may be estimated to value Rs. 621, were granted as follows:—437 and 175 cubic feet in the Darjeeling and Teesta sub-divisions respectively for bonfires at the Jubilee celebration; 10,395 cubic feet in Singbhoom were granted free for the personal use of villagers in the Porahat range.

The 8,980 bamboos, valued at Rs. 23, were granted—500 to residents in Porahat villages in Singbhoom and 8,480 to Khorda ryots in Orissa, after the fire above mentioned.

The 3,244 maunds minor produce were thus distributed—Buxa division, 130 maunds to certain villagers for assistance rendered in fire conservancy; in Singbhoom, 5,010 maunds to residents in Porahat; and in Khorda, 27,300 maunds of laterite and ghooting lime, under the executive order of Government, to residents on the estate for wells and other works of public utility.

132. Free grants and concessions as regards grazing were allowed in the Teesta sub-division under existing orders to a value of Rs. 1,584; in Singbhoom to certain Government ryots to the value of Rs. 14; and the value of the concessions granted by the executive order of Government to Khorda ryots in Orissa, at half the existing rates for outsiders, amounts to Rs. 1,01,437 for the year.

4.—Summary of Produce removed from the Forests.

133. The following summary, taken from the abstracts of the circle given at foot of forms Nos. 54 and 55, shows this compared with the figures for the previous year, which latter having been corrected, differ somewhat from those recorded in paragraph 98 of last year's report. The figures include drift and waif, as well as confiscated timber and produce:—

Class of Forest, and of agency employed.	Timber.		Fuel.		Bamboos.		Minor Forest Produce.	
	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.	1886-87.	1885-86.
	C. ft. wood.	C. ft. wood.	C. ft. wood.	C. ft. wood.	No.	No.	Mds	Mds.
Reserved Forests.								
By Government agency	119,288	81,841	304,127	160,296	723,384	996,903	11	.....
„ Purchasers	6,358,600	5,959,663	10,317,939	13,223,598	5,267,381	2,894,369	41,45,229	36,32,177
„ Free grants	1,483	8,120	11,007	175	500	.....	5,160	1,443
„ Right-holders	.....	.....	.....	.....	.....	.....	.....	.....
Total ..	6,479,377	6,049,624	10,633,073	13,384,071	5,990,265	3,893,272	41,50,380	36,33,620
Protected Forests.								
By Government agency	16	.....	.....	.....	.....	.....	1	.....
„ Purchasers	343,837	195,430	6,691,632	5,201,387	553,840	641,000	5,45,676	7,96,407
„ Free grants	920	1,296	.....	.....	8,480	14,041	27,300	.....
„ Right-holders	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	344,773	196,726	6,691,632	5,201,387	562,320	655,041	5,72,977	7,96,407
Unclassed State Forests and Waste Lands.								
By Government agency	6,784	5,574	128	.....	1,040	13,032	.....	.....
„ Purchasers	239,473	333,642	89,653	173,688	11,419,439	12,102,215	1,77,960	7,82,425
„ Free grants	.....	.....	.....	.....	.....	.....	.....	.....
„ Right-holders	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	246,257	339,166	89,781	173,688	11,421,379	12,116,147	1,77,960	7,82,425
Grand total out-turn ...	7,070,407	6,585,516	17,414,686	18,759,146	17,973,964	16,664,460	52,01,317	52,12,452
In 1886-87 { Increase	484,891	.....	.....	.....	1,309,504	.....	.....	.....
In 1886-87 { Decrease	.....	.....	1,344,460	.....	.....	.....	11,135	.....

The total out-turn of wood was 24,485,093 cubic feet solid against 25,344,662 cubic feet in the previous year, or a decrease of 859,569 cubic feet as compared with 1885-86, the causes of which and of the differences in bamboos and minor produce are fully explained in the preceding sections of this chapter.

CHAPTER V.—FINANCIAL RESULTS.

134. The financial results of the department compare as follows with those of the two preceding years:—

	Receipts.	Charges.	Surplus.
	Rs.	Rs.	Rs.
1884-85	5,71,152	4,11,915	1,59,237
1885-86	5,97,432	3,70,399	2,27,033
1886-87	6,53,634	4,22,781	2,30,853

The increase in *Receipts*, which are far less than they should be owing to wholesale rejections of sleepers delivered for the Northern Bengal State Railway, is due partly to the Railway authorities having taken over most of the old sleepers on stock and to the increased demand of the Military authorities for fuel from the Darjeeling sub-division, and partly to the increase in revenue in the Sunderbuns division from timber &c. removed from the forests by purchasers. The revenue of the year includes an erroneous credit of Rs. 400 in the Jupigori division, which sum was twice entered in the accounts; the mistake was pointed out to the Audit Office on 31st May 1887 and the error admitted, but the necessary correction was not made on the ground that the books were closed for the year.

The increase in *Charges* is Rs. 41,678 under "A—Conservancy and Works" and Rs. 10,704 under "B—Establishments." The former is caused partly by an increase of about Rs. 10,000, chiefly on carriage of sleepers to Kaunia in the Buxa division, and of about the same amount on supplying firewood to the Commissariat Department in the Darjeeling sub-division; while Rs. 33,282 were charged as part cost of the construction of the new steamer *Seal* in the accounts of the Sunderbuns division for the year, the gross

expenditure under other heads of "A" being generally less than in the previous year. The latter is due to increases under head "I—Salaries" of about Rs. 1,400 under pay of Conservator, about Rs. 8,000 under salaries of superior officers, and about Rs. 1,000 under salaries of subordinate establishments, owing to the full sanctioned strength of these establishments having been more nearly worked up to. The expenditure under travelling allowances was about Rs. 500 less, and under contingencies about Rs. 500 more, than in the previous year.

The net difference in value of timber in sale depôts and of stores, tools, and plant, &c., as per forms 57A and B, is Rs. 4,517 in favour of the year.

135. The distribution of receipts and charges, abstracted from form No. 62, which gives the actual figures for each division with a share of Direction and general charges added, is:—

		Departmental Operations.	Other Revenue.	Formation, Protection and Improvement of Forests.	Total.
		Rs.	Rs.	Rs.	Rs.
Receipts	...	1,09,760	5,43,874	.....	6,53,634
Charges	...	85,408	1,53,044	1,84,329	4,22,781
Surplus	...	24,352	3,90,830	.....	2,30,853
Deficit	...	.....	.....	1,84,329	.....

The surplus under *Departmental Operations* is owing to increased sales chiefly of the old stock in depôts, the value of which, as will be seen from form No. 57A, is Rs. 28,904 less at the close than at the commencement of the year, though the closing balance includes the rejected sâl sleepers of the Buxa division at Kaunia, referred to in paragraph 108 above, the cost of sawing and carriage of which was over Rs. 10,000. It was partly due also to increased sales of fuel to the Military Department at Darjeeling. The only divisions that show a deficit under this head are Chota Nagpore (of Rs. 3,668), due partly to mismanagement of bamboo operations in Palamow, and partly to keeping a few sawyers at work in anticipation of future railway requirements in Singbhoom, and the Sunderbuns (Rs. 61), due to expenditure on collecting drift wood which was not sold during the year.

Under the head *Other Revenue* the receipts exceed those of the previous year by Rs. 20,750, due mainly to the increase in the Darjeeling division (Rs. 6,841), the Buxa division (Rs. 2,013), the Sunderbuns division (Rs. 28,624), and the Orissa division (Rs. 2,530), and to the decrease of Rs. 18,271 in the Chittagong division and of small amounts in the Julpigori and Chota Nagpore divisions. The charges exceed those of the previous year by Rs. 22,883, which is more than accounted for by the share (Rs. 24,962) of the cost of the new steamer *Seal* taken against this head in the distribution of charges for the year in the Sunderbuns division.

The expenditure on the *Formation, Protection and Improvement of the Forests* is Rs. 11,377 in excess of the previous year. This is chiefly owing to the formation of the Working Plans division, which accounts for Rs. 15,381 of the expenditure taken to this head. The divisions that show less expenditure than in 1885-86 are—Buxa (Rs. 5,896), chiefly under fire protection and share of establishment charges; Chota Nagpore (Rs. 7,782), Orissa (Rs. 1,126), chiefly under establishment charges. Those that show more are—Darjeeling (Rs. 1,144) under establishment charges, Julpigori (Rs. 276) under drift and waif wood, Chittagong (Rs. 569) under plantations, and Sunderbuns (Rs. 8,871) under purchase of stores, tools and plant, due to a share of cost of the steamer *Seal* being taken to this head.

CHAPTER VI.—GENERAL REMARKS.

136. The remarks regarding services of officers will be found in Appendix C to this report.

FORM No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1886-87.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1886.		Added during the year.	Excluded or transferred to other heads.	Area on 31st March 1887.		Number and date of notification of addition or transfer.	Remarks.
				Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Darjeeling Sub-division.	Senchal	Darjeeling district.	Rinchintong Dhara, north block ..	17							
			Ditto, south do. ...	38							
			Rangnu block	500							
			Senchal do.	817	5	.....	.....	3,389	5		
			Dooteria do.	534							
			Rangbul do.	650							
			Sonada do.	666							
			Pachim do.	468							
	Muhalderam ...	Ditto	Chattakpur do.	875	7	.....	.....	4,136	7		
			Sepoydura do.	1,145							
			Mamrim do.	1,216							
			Surell do.	900							
	Tukdah	Ditto ...	Rangirum do.	500	12	.....	.....	7,809	12		
			Dawaipani do.	857							
			Rungjo do.	1,100							
			Tiger Hill do.	755							
			Rangbi do.	1,037							
			Rishap do.	1,062							
			Poomong do.	470							
			Hoom do.	1,060							
			Tukdah do.	668							
	Goompahar ...	Ditto ...	Goom do.	600	14	.....	... ..	9,265	14		
			Nai do.	839							
			Rishthat do.	835							
			Tungsong do.	853							
			Poobong do.	614							
			Balasan do.	811							
			Chowtong do.	1,047							
			Permaigiri do.	1,284							
			Palongdong do.	931							
			Poorainbong do.	900							
			Rungbong do.	671							
	Singalila	Ditto ..	Little Rangit do.	2,087	64	.....	.....	41,254	64		
			Tongla do.	1,903							
			Rilling do.	1,871							
			Salambong do.	1,170							
			Kankibong do.	4,219							
			Rithu do.	3,485							
			South Rimbick do.	4,126							
			North ditto do.	3,191							
			Sandukpho do.	3,560							
			Siri do.	3,857							
			Rumman do.	3,603							
			Suburkam do.	5,495							
			Phalut do.	3,617							
			Total ...	65,533	102	.....		65,533	102		
Teesta Sub-division.	West Teesta ...	Ditto ...	Rangit forest—								
			Radamtam block	589	6	.....	.....	21,822	3		
			Sumbong do.	1,741							
			Seem do.	342							
			Pashok do.	1,011							
			Mangwa forest	995	1½						
			Rasng do.—								
			Rangnu block	1,365	6						
			Rasng do.	1,097							
			Berrik do.	1,122							
			Sitong forest—								
			Kundong block	1,403	10						
			Sitikhola do.	1,472							
			Numbong do.	1,547							
			Sitong do.	1,994							
			Sivoke Hills forest—								
			Andera block	1,179	10½						
			Ruyem do.	1,091							
			Chawa do.	1,655							
			Gola do.	1,376							
			Upper Ghoramara do.	1,363							
			Rilli forest—								
			Ponbu block	1,850	8						
			Gooling do.	885							
			Nazeokh do.	1,786							
			Tunang do.	906							
			Kalimp ng forest—								
			Comesse block	1,364	11½						
			Rinkinpung do.	1,552							
			Tashiding do.	1,254							
			Mongbur do.	1,382							
			Balukop do.	1,798							
			Dumsong forest—								
			Sungseer block	2,963	22	.....	.....	40,738	64		
			Manrchu do.	2,424							
			Rangpo do.	1,871							
			Kashyem do.	2,471							
			Kecha do.	2,645							
			Dumsong do.	1,638							
			Rissoom forest—								
			Palengaon block	1,110	9						
			Mayrong do.	1,280							
			Rissoom do.	484							
			Paktheon do.	1,620							
			Khempong do.	1,330							
			Loolagaon forest—								
			Siahoor block	1,735	13						
			Kuffeer do.	1,456							
			Loolagaon do. . ..	1,530							
			Pemling do.	1,225							
			Bokhim do.	1,060							
			Chumung do.	1,253							

FORM No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1886-87—(continued).

Division.	Range.	Civil District or Territory.	Name of Forest.		Area on 1st April 1886. Acres.	Area on 1st April 1886. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1887. Acres.	Area on 31st March 1887. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Teesta Sub-division—concluded.	Pankasari ...	Darjeeling District ...	Pankasari forest—									
			Kolbong	block	2,306	16						
			Rushett	do.	1,788							
			Labah	do.	2,331							
			Pankasari	do.	3,594							
			Rhenock forest	... ...	3,125	5						
			Rechi La forest—									
			Rechi La	block	4,206	17						
			Thosum	do.	2,967							
			Rooka	do.	3,382							
			Mo forest		4,463	7						
			Jaldaka forest—									
			Cheechu	block	3,304	23	.....	.....	65,451	102		
			Paren	do.	3,380							
			Rongo	do.	4,590							
			Khumani	do.	4,600							
			Nar forest—									
			East Nar	block	4,600	15½						
			West do.	do.	5,493							
			Dalingkot forest—									
			Ambiok	block	1,225	10						
			Dalingkot	do.	2,166							
			Sucham	do.	3,170							
			Mal forest		5,493	8½						
	Obel	Ditto ...	Mungpong	forest	6,230	10						
			Leesh	do.	4,387	7						
			Geesh forest—									
			Churonthi	block	4,941	21	.....	.....	32,120	50		Excluded on rectification of Darjeeling and Julpigori District boundary.
			Ramthik	do.	3,349							
			Lohti	do.	5,280							
			Noam forest—									
			Noam	block	3,705	12	.....	53	.....	.....	3rd March 1887	
			Pugo	do.	4,231							
				Total ...	160,185	250	.....	53	160,132	250		
Kurseong Sub-division.	Kurseong	Ditto ...	Dhobijhora forest		589	1						
			Babukhola forest—									
			Babukhola	block	1,320	3	.....	.....	2,873	5		
			Majua	do.	520							
			Sibakhola	forest	408	1						
			Paglajhora	do.	35	.....						
	Balasan	Ditto ...	Manjua	forest	1,112	2	.....	...	10,618	17	26th May 1886 12th Mar. 1887	Added and excluded from 1st June 1886 and 1st January 1887, respectively.
			Koohein	do.	514	1	.....	.....				
			Manjha forest—									
			Khairbani	block	1,984	6	.....	.....	.....	.....		
			Lohaguri	do.	584							
			Manjha	do.	1,511	.....	2	2				
			Mechi forest—									
			Upper Mechi	block	936	5	.....	.....				
			Central do.	do.	504							
			Lower do.	do.	805							
			Nipania	do.	473							
			Kolabari	do.	494							
			Gurabadi	do.	528							
			Surjbur	do.	52							
			Balasan forest—									
			Balasan	block	671	3	.....	.....				
			Tarabari	do.	1,090							
	Terai	Ditto ...	Tukriajhar forest		1,364	2						
			Dalkajhar forest—									
			Khadima	block	250	9	.....	.....	9,784	15		
			Tapu	do.	430							
			Dalka	do.	604							
			Central	do.	590							
			Danhara	do.	656							
			Sengdubi	do.	660							
			Moolta	do.	431							
			Laifa	do.	622							
			Rishabari	do.	682							
			Bagdogra	do.	526							
			Harlia	do.	300							
			Pantapari forest—									
			Pantapari	block	755	4						
			Boranti	do.	484							
			Tirihanna	do.	489							
			Latua	do.	249							
			Borobhita	do.	633							
	Bamonpokri ...	Ditto ...	Bamonpokri forest		1,373	3	.....	.....	2,055	3		
			Rakti	do.	195							
			Lamagumba	do.	488							

FORM No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1886-87—(continued).

Division.	Range.	Civil District or Territory.	Name of Forest.		Area on 1st April 1886. Acres.	Area on 1st April 1886. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1887. Acres.	Area on 31st March 1887. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Kurseong Sub-division—*concluded*.	Sukna	Darjeeling district	Sukna forest—									
			Sukna	block	1,302	7	.....	.....	8,680	14		
			Kuklong	do.	881							
			Chamta	do.	516							
			Adalpur	do.	432							
			Kynanuka	do.	498							
			Rungdung	do.	774							
			Mahanadi forest—									
			Pundig	block	2,156	7						
			Mahanadi	do.	654							
			Mohurgong	do.	718							
			Hattisarra	do.	544							
			Panchanai	do.	461							
	Champasari ...	Ditto ...	Champasari forest—									
			Gulma	block	469	5			21,325	33		
			Singimari	do.	824							
			Upper Champasari	do.	1,085							
			Lower do.	do.	685							
			Choklong forest—									
			Lower Ghoramara	block	2,494	16						
			Gulma Valley	do.	1,870							
			Choklong	do.	2,060							
			Jogijhora	do.	1,227							
			Kuhil	do.	1,326							
			Bandarjhola	do.	1,287							
			Latpanchor forest—									
			Mana	block	2,302	5						
			Latpanchor	do.	1,193							
			Sivoke forest—									
			Janaikuri	block	1,338	7						
			Samardanga	do.	861							
			Sivoke, north	do.	644							
			Do., east	do.	690							
			Do., west	do.	686							
			Shilibhita	do.	404							
				Total ...	55,540	87	2	2	55,540	87		
Julpigori Division.	Apalchand ...	Julpigori district	Apalchand forest—									
			Guzliduba	block	3,312	30	.....	.....	18,861	30		
			Rajadanga	do.	6,986							
			Chengmari	do.	3,200							
			Malhati	do.	310							
			Kyranti	do.	53							
	Tondu	Ditto ...	Tondu forest—									
			North Tondu	block	7,740	85	.....	.....	54,460	85		
			Upper do.	do.	21,480							
			Lower do.	do.	25,240							
	Muraghat ...	Ditto ...	Dainah	forest	15,360	24	.....	...	31,008	48		
			Muraghat	do.	10,880	17						
			Rehti	do.	2,923	4						
			Goshaihat	do.	1,840	3						
	Falakata	Ditto ...	Dulgaon	forest	1,375	2	.....	.....	14,019	22		
			Dumchi	do.	3,062	5						
			Khairbari	do.	1,775	3						
			Teeti	do.	7,795	12						
			Salbari	do.	12	.....						
				Total ...	118,343	185	.....		118,343	185		
Buxa Division.	Borojhar ...	Ditto ...	Borojhar	forest	35,200	55	.....	.....	44,100	69		
			Butri	do.	1,400	2						
			Gabur Basra	do.	6,400	10						
			Salkuer	do.	1,100	2						
	Buxa	Ditto ...	Buxa forest—									
			Raimatong	block	5,136	145	.....	.....	92,507	145		
			Poro	do.	16,000							
			Rajabhatkawa	do.	30,091							
			Panbari	do.	21,120							
			Hill forests	do.	20,160							
	Haldibari ...	Ditto ...	Baidak	forest	12,800	20	.....	.....	32,855	51		
			Dhumpara	do.	7,040	11						
			Bhotka	do.	12,800	20						
			Malakalguri	do.	215	.....						
				Total ...	169,462	265	.....	.....	169,462	265		
Palasbow Sub-division.	Betlah ...	Lohardugga district ...	Kechki	forest	440	11	.....	.....	13,687	21	.....	Redistribution of Range areas.
			Betlah	do.	6,847							
	Saidope	Ditto ...	Kuth block, Saidope	do.	.....	.....	6,400	.....				
			Saidope	do.	27,120	44	.....	6,400	21,120	33		
	Ramundag ...	Ditto ...	Tungari	do.	5,715	25	.....		16,595	26		
			Ramundag	do.	10,880							
	Kumandi	Ditto ...	Kumandi	do.	8,960	19	.....	.....	12,036	19		
			Chatum	do.	855							
			Peeree	do.	1,523							
			Ooreeya	do.	698							
	Southern .	Ditto ...	Seemah	do.	20,240	80	.....	.....	56,951	89		
			Barasand	do.	30,711							
				Total ...	120,389	188	6,400	6,400	120,389	188		

Form No. 49.

FOREST DEPARTMENT, BENGAL.

Area of Reserved Forests, 1886-87 - (concluded).

Division.	Range.	Civil District or Territory.	Name of Forest.		Area on 1st April 1886. Acres.	Area on 1st April 1886. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred to other heads. Acres.	Area on 31st March 1887. Acres.	Area on 31st March 1887. Equivalent in square miles.	Number and date of notification of addition or transfer.	Remarks.
Hazaribagh Sub-division.	Koderma	Hazaribagh district.	Koderma forest		29,767	47	.....	.....	29,767	47		
Singbhoom Sub-division.	Ranchi	Lohardugga district.	Horhap	forest	1,100	2	.....	2	1,098	2	6th Dec. 1886	Excluded from 1st April 1886.
	Saranda	Singbhoom district.	Saranda	do.	199,740	312	.....	.....	199,740	312		
	Chyebasa ...	Ditto ..	Saitha	do.	18,560	29	.....	.....	64,640	101		
			Santara	do.	46,080	72						
	Kolhan	Ditto .	Latua	do.	44,800	70	.....	.....	69,120	108		
			Loda	do.	24,320	38						
			Total	...	334,600	523	... ..	2	334,598	533		
Sunderbuns Division.	Satkhira	Khulna district.	Satkhira	forest	244,480	382	.....	.....	244,480	382		
	Khulna		Khulna	do.	447,353	699	.....	.....	447,353	699		
	Bagirhat... ...		Bagirhat	do.	320,000	500	.....	.....	320,000	500		
			Total	...	1,011,833	1,581	.....	.....	1,011,833	1,581		
Chittagong Division.	Kassalong ...	Chittagong Hill Tracts.	Kassalong	forest	488,320	763	.....	.....	488,320	763		
	Sitapahar ...		Sitapahar	do.	7,020	11	.....	.....	7,020	11		
	Matamori ...		Matamori	do.	160,640	251	.....	.....	160,640	251		
	Sungoo		Sungoo	do.	93,190	145	.....	.....	93,190	145		
	Rinkheong ...		Rinkheong	do.	137,570	215	.....	.....	137,570	215		
			Total	...	886,740	1,385	.....	.....	886,740	1,385		
Orissa Division, Angul Sub-division.	Tikarpara ...	Tributary Mehals of Orissa.	Tikarpara forest ..	... ...	103,040	161	.....	.....	103,040	161		
	Bagmunda ...	Ditto ...	Bagmunda do. ...	... ...	40,960	64	.....	.....	40,960	64		
	Durgapur ...	Ditto ...	Durgapur forest—									
			Durgapur	block	8,320							
			Tabada	do.	2,720							
			Wontullia	do.	2,400	55	.....	.....	35,200	55		
			Kotoda	do.	6,720							
			Similipoda	do.	9,920							
			Konoloi	do.	5,120							
			Total, Angul Sub-division	..	179,200	280	.....	.....	179,200	280		
Khorda Sub-division.	Dandimal	Pooree district.	Dandimal forest—									
			Churang	block	1,330							
			Chandka	do.	8,240	32	.....	.....				
			Barhapita	do. I... ...	9,680							
			Ditto	do. II ...	1,920							
			Haripur	do.	.....	.....	941					
			Jamjhari	do.	.....	.....	800					
			Majana	do.	.....	.....	435		27,873	44	15th and 30th Nov. 1886.	Declared to be Reserved Forest from 15th Dec. 1886.
			Bhola	do.	.....	.....	281	.....	.....	.....		
			Daspur	do.	.....	.....	452					
			Bharatpur	do.	.....	.....	2,963					
			Rampur	do.	.....	.....	1,125					
			Mendhasal	do.	.....	.....	815					
	Khorda	Ditto ...	Khorda forest—									
			Barunai Hill	block	1,200	5	.....	.....	4,814	7		
			Panchgarh	do.	1,760							
			Dandimai forest—									
			Jaimangal	block	.....	.....	356	.....	.....	.....	Ditto	Ditto.
			Nagapali	do.	.....	.....	1,498					
			Banpur forest—									
			Arang	block	6,840							
	Banpur	Ditto ...	Tamna	do.	8,280	32	.....	.....	20,601	32		
			Kattal	do.	2,301							
			Bankar	do.	3,120							
			Kuhuri forest—									
	Kuhuri	Ditto ...	Kuhuri	block	2,120	10	.....	.....	6,400	10		
			Sulia	do.	4,280							
			Total, Khorda Sub-division	...	50,831	79	9,157	....	59,688	93		
			Total, Orissa Division	...	229,731	359	9,157	.....	238,888	373		
			Grand Total	...	3,182,143	4,972	15,559	6,437	3,191,925	4,986		

Form No. 49A.

FOREST DEPARTMENT, BENGAL.

Area of Protected Forests, 1886-87.

Sunderbuns.	Diamond Harbour	24-Pergunnahs district.	Diamond Harbour	forest	336,453	526	.....	1,488	334,965	523	7th Sept. 1886.	Transferred to Civil authorities from 1st April 1886.
	Basirhat	Ditto ..	Baripore	do.	208,000	325	.....	.....	208,000	325		
	Satkhira	Khulna district	Basirhat	do.	650,575	1,016	.....	.....	650,575	1,016		
	Khulna	Ditto ...	Satkhira	do.	15,300	24	.....	.....	15,300	24		
			Khulna	do.	32,589	51	.....	2,182	30,407	48	Ditto	Ditto.
			Total	...	1,242,917	1,942	.....	3,670	1,239,247	1,936		
Orissa.	Dandimal	Pooree district.	Dandimal	forest	35,952	56	.....	7,303	28,649	45	15th and 30th Nov. 1886.	Transferred to Reserved Forest.
	Khorda		Khorda	do.	85,151	133	.....	1,854	83,297	130	Ditto ...	Ditto,
	Banpur		Banpur	do.	45,707	72	.....	2,095	43,612	68	.....	Ditto to Civil authorities.
	Kuhuri		Kuhuri	do.	10,218	16	.....	.....	10,218	16		
			Total	...	176,928	277	.....	11,252	165,676	259		
			Grand Total	...	1,419,845	2,219	.....	14,922	1,404,923	2,195		

FORM No. 49B.

FOREST DEPARTMENT, BENGAL.

Unclassed State Forests and Waste Lands, 1886-87.

DIVISION OR RANGE.	Civil District or Territory.	Name of Forest.	AREA ON 1ST APRIL 1886.		ADDED DURING THE YEAR.	EXCLUDED OR TRANSFERRED TO OTHER HEADS.	AREA ON 31ST MARCH 1887.		Number and date of notification of addition or transfer.	REMARKS.
			Acres.	Equivalent in square miles.	Acres.	Acres.	Acres.	Equivalent in square miles.		
Chittagong Division ...	Chittagong Hill Tracts.	Hill Tracts	2,581,420	4,033	.....	.....	2,581,420	4,033		
		Total ...	2,581,420	4,033	.....	.....	2,581,420	4,033		

FORM No. 50.

FOREST DEPARTMENT, BENGAL.

Register of breaches of Forest Rules during 1886-87.

PROSECUTIONS IN THE COURTS OF LAW.

FOREST DIVISION AND CIVIL DISTRICT.	Cases pending from 1885-86.	NEW CASES OF THE YEAR.					Total cases.	DISPOSED OF DURING THE YEAR.						Cases pending at close of year.
		Injury to forest by fire.	Unauthorised felling or appropriation of wood and minor forest produce.	Grazing without permission or in tracts in which grazing is prohibited.	Other offences.	Total new cases of the year.		Convictions.		Acquittals.		Total.		
								Cases.	Persons.	Cases.	Persons.	Cases.	Persons.	
Darjeeling district—														
Darjeeling sub-division ...	.....	3	110	123	2	238	238	232	273	6	6	238	279	...
Teesta ditto ...	.....	5	6	7	1	19	19	16	19	1	1	17	20	2
Kursseong ditto ...	.....	.....	9	5	1	15	15	10	11	4	11	14	22	1
Julpigori district—														
Julpigori division	.....	4	.....	.....	...	4	4	3	4	...	...	3	4	1
Buxa ditto	.....	1	1	.....	5	7	7	6	16	1	3	7	18	...
Lohardugga district—														
Palamow sub-division	.....	2	.....	.....	...	2	2	2	2	...	...	2	2	...
Hazaribagh district—														
Hazaribagh sub-division ...	.....	.....	.....	.....	...	...	...	...	...	...	...	...	...	...
Singbhoom district—														
Singbhoom sub-division ...	.....	8	10	1	2	21	21	13	53	7	27	20	80	1
Lohardugga district—														
Singbhoom sub-division ...	.....	.....	1	.....	2	3	3	...	...	2	7	2	7	1
Khoolna district—														
Sunderbuns division	*88	.....	5	.....	232	237	325	294	318	28	33	322	351	3
24-Pergunnahs district—														
Sunderbuns division	3	.....	2	.....	11	13	16	9	9	7	9	16	18	...
Chittagong district—														
Chittagong division	1	.....	.....	.....	2	2	3	2	3	...	...	2	3	1
Chittagong Hill Tracts—														
Chittagong division	.....	.....	4	.....	...	4	4	...	...	3	3	3	3	2
Pooree district—														
Khoorda sub-division	.....	.....	.....	99	165	264	264	223	564	41	124	264	688	...
Orissa Tributary Mehals—														
Angul sub-division	2	3	7	.....	...	10	12	11	59	...	...	11	59	1
Total ...	94	26	155	235	423	839	933	821	1,351	99	223	920	1,554	13

* Shown in last year's return erroneously under 24-Pergunnahs district.

Form No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1887 *to accompang Report for* 1886-87.

Divisions and Sub-divisions.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 31st May 1886.	During dry season of 1887.			Cost during the season, up to 31st May 1887.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	I.—Areas protected by isolation and other special measures.		Acres.	Acres.	Acres.	Acres.	Rs.	
Teesta Sub-division (Darjeeling Division).	West Teesta Range—							
	Raiang forest	1885-86	3,851	4,084	.....	4,084	187	
	Sitong do.	1879-80	6,416	6,416	.....	6,416	89	
	Sivoke Hills do.	1879-80	6,664	6,664	.....	6,664	97	
	East Teesta Range—							
	Rilli forest	1879-80	4,952	5,287	.....	5,287	138	
	Kalimpong do.	1885-86	6,530	7,350	.....	7,350	147	
	Chel Range—							
	Mungpong forest	1879-80	31,958	6,230	.....	6,230	431	Detailed information as to expenditure not given by Sub-divisional Officer.
	Leesh do.			4,287	.....	4,287		
	Geesh do.			13,730	.....	13,730		
	Noam do.			7,873	.....	7,873		
	Total ...	.....	60,371	61,921	... ..	61,921	1,046	
Kurseong Sub-division (Darjeeling Division).	Balasan Range—							
	Manjua forest	1882-83	1,112	1,112	... ..	1,112	53	
	Manjha do.	1879-80	4,063	4,079	.....	4,079	194	
	Mechi do.	1884-85	3,075	3,152	94	3,058	115	
	Balasan do.	1884-85	1,760	1,761	.....	1,761	71	
	Teral Range—							
	Tukriajhar forest	1882-83	1,355	1,364	.....	1,364	148	
	Dalkajhar do.	1878-79	5,820	5,820	.....	5,520	739	
	Pantapari do.	1878-79	2,597	2,600	.....	2,600	332	
	Bamonpokri Range—							
	Bamonpokri forest	1876-77	1,372	1,372	.....	1,372	524	
	Rakti do.	1876-77	141	195	.....	105	130	
	Lamagumba do.	1876-77	488	488	.....	488	74	
	Sukna Range—							
	Sukna forest	1876-77	4,853	4,853	.....	4,853	726	
	Mahanadi do.	1876-77	4,533	4,533	.....	4,533	206	
	Champasari Range—							
	Champasari forest	1876-77	3,063	3,063	.....	3,063	60	
	Choklong do.	1876-77	10,144	10,144	.....	10,144	202	
	Latpanchor do.	1876-77	3,495	3,495	.....	3,495	70	
	Sivoke do.	1876-77	4,523	4,023	94	4,529	90	
	Total ...	.....	51,908	52,154	188	51,966	3,792	
Julpigori Division.	Apalchand Range—							
	Guzliduba block	1878-79	8,312	8,312	.....	8,312	70	
	Rajadanga do.	1878-79	6,986	6,986	... ...	6,986	373	
	Chengmari do.	1878-79	3,200	3,200	1,001	2,199	101	
	Malhati do.	1878-79	310	310	.....	310	13	
	Kyranti do.	1878-79	23	53	.....	53	8	
	Tondu Range—							
	North Tondu block ...	1878-79	7,540	7,740	.....	7,740	75	
	Upper ditto	1878-79	21,030	21,480	40	21,440	204	
	Lower ditto	1878-79	24,940	25,240	1,400	23,840	206	
	Muraghat Range—							
	Dainah forest	1881-82	11,520	15,360	11,520	3,840	83	
	Muraghat do.	1872-73	10,880	10,880	5,440	5,440	175	
	Rehti do.	1881-82	2,923	2,923	.....	2,923	21	
	Goahaihat do.	1881-82	1,227	1,840	110	1,730	36	
	Falakata Range—							
	Dulgaon forest	1879-80	1,375	1,375	.....	1,375	65	
	Dumchi do.	1879-80	3,062	3,062	.....	3,062	74	
	Khairbari do.	1882-83	1,775	1,775	.....	1,775	59	
	Teesti do.	1882-83	7,795	7,795	.....	7,795	185	
	Total ...	.....	112,848	118,331	19,511	98,820	1,748	
Buxa Division	Borojhar Range—							
	Borojhar forest (part) ..	1879-80	16,000	16,000	.....	16,000	491	
	Salkuer do.	1883-84	1,100	1,100	40	1,060	119	
	Buxa Range—							
	Raimatong block ...	1876-77	5,136	5,136	.....	5,136	1,415	Details of expenditure not recorded according to blocks.
	Poro do.	1876-77	16,000	16,000	.....	16,000		
	Rajabhatkawa do.	1876-77	30,091	30,091	430	29,661		
	Pantari do.	1876-77	21,120	21,120	.....	21,120		
	Hill forests block (part) ...	1876 77	100	100	.....	100		
	Haldibari Range—							
	Raidak forest (part) ..	1882-83	6,400	6,400	.....	6,400	568	
	Dhumpara do.	1885-86	3,540	7,040	50	6,990	18	
	Bholka do.	1877-78	12,800	12,800	.....	12,800	584	
	Mahakalgari do.	1886-87	... .	215	100	115	10	
	Total ...	.....	112,287	116,002	620	115,382	3,205	
Palamow Sub-division (Chota Nagpore Division).	Betlah Range—							
	Keohki forest	1879-80	440	440	.....	440	158	Detailed expenditure not recorded for each forest by Sub-divisional Officer.
	Betlah do.	1879-80	6,847	6,847	500	6,347		
	Kedh block, Saidope forest	1879-80	6,400	6,400	500	5,900		
	Saidope Range—							
	Saidope forest	1879-80	21,120	21,120	1,760	19,360	160	
	Ramundag Range—							
	Tungari forest	1880-81	5,715	5,715	.....	5,715	106	Ditto ditto.
	Ramandag do.	1879-80	10,880	10,880	325	10,555		
	Kumandi Range—							
	Kumandi forest	1879-80	8,960	8,960	.....	8,960	208	Ditto ditto.
	Chatum do.	1885-86	855	855	.....	855		
	Peoree do.	1885-86	1,523	1,523	.....	1,523		
	Ooreya do.	1885-86	698	698	445	253		
	Southern Range—							
	Seemah forest	1879-80	26,240	26,240	440	25,800	459	Ditto ditto.
	Barasand do.	1879-80	29,961	30,711	.....	30,711		
	Total ...	.....	119,130	120,389	3,970	116,419	1,091	

FORM No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1887 to accompany Report for 1886-87—continued.

DIVISIONS AND SUB-DIVISIONS.	FOREST TRACTS.	Year in which protection commenced.	Area actually protected up to 31st May 1886.	DURING DRY SEASON OF 1887.			Cost during the season, up to 31st May 1887.	REMARKS.
				Area attempted to be protected.	Failures.	Actually protected.		
	I.—Areas protected by isolation and other special measures—concluded.		Acres.	Acres.	Acres.	Acres.	Rs.	
Hazaribagh sub-division (Chota Nagpore Division).	Koderma forest	1879-80	29,767	29,767	.....	29,767	343	
Singbhoom Sub-division (Chota Nagpore Division).	Saranda Range—							
	Ankua block	1884-85	.....	35,200	20,000	15,200	511	Details of expenditure not recorded according to blocks.
	Ambia do.	1885-86	.....	19,300	17,000	2,200		
	Chyebassa Range—							
	Saitha block	1884-85	17,060	18,560	642	17,918	385	
	Kolhan Range—							
	Leda block	1884-85	.....	24,330	18,000	6,330	335	
	Porahat Range—							
	Birda block	1884-85	3,840	3,840	.....	3,840	94	Proposed reserve.
	Total ...	.....	20,900	101,120	55,642	45,478	1,325	
Chittagong Division.	Sitapahar plantation	1877-78	.....	471	.....	471	168	
Angul Sub-division (Orissa Division).	Tikarpara Range	1884-85	51,520	103,040	16,980	86,060	390	
	Bagmunda do.	1884-85	39,720	40,960	6,500	34,460	119	
	Durgapur Range—							
	Durgapur block	1884-85	24,374	8,320	.....	8,320	309	Details of expenditure not recorded according to blocks.
	Tabada do.			2,720	1,300	1,420		
	Wontullia do.			2,400	1,800	600		
	Kotoda do.			6,720	.....	6,720		
	Simplipoda do.			9,920	.....	9,920		
	Kouloi do.			5,120	.....	5,120		
	Total ...	.....	100,614	179,200	26,580	152,620	818	
Khorda Sub-division (Orissa Division).	Dandimal Range	1885-86	20,510	27,673	893	26,980	220	Details of blocks in which fires occurred have not been recorded in the divisional report.
	Khorda do.	1885-86	2,800	4,814	.....	4,814	34	
	Banpur do.	1885-86	20,601	20,601	2,500	18,101	94	
	Kuhuri do.	1885-86	6,400	6,400	3	6,397	36	
	Total ...	.....	50,311	59,688	3,396	56,292	393	
	Total Head I ...	.....	604,143	839,043	109,907	729,136	13,937	
	II.—Areas protected by less extensive measures, and by rules.							
Darjeeling Sub-division (Darjeeling Division).	Senchal Range	1881-82	3,380	3,389	.....	3,389	4	
	Mahalderam do.	1881-82	4,136	4,136	.....	4,136	10	
	Tukdah do.	1881-82	7,509	7,509	.....	7,509	3	
	Goompahar do.	1881-82	9,245	9,245	.....	9,245	1	
	Singalila do.	1882-83	41,094	41,254	.....	41,254	30	
	Total ...	.....	65,373	65,533	.....	65,533	57	
Teesta Sub-division (Darjeeling Division).	West Teesta Range—							
	Rangit forest	1881-82	3,663	3,663	.....	3,663	139	Detailed information as to expenditure not given by Sub-divisional Officer.
	Mangwa do.	1881-82	995	995	.....	995		
	East Teesta Range—							
	Dumsong forest	1881-82	93,046	14,032	.....	14,032	154	Ditto ditto.
	Risoom do.			5,830	.....	5,830		
	Loolagoan do.			8,239	.....	8,239		
	Pankesari Range—							
	Pankesari forest			10,109	.....	10,109	56	Ditto ditto.
	Rhenock do.			3,225	.....	3,225		
	Rechi La do.			10,644	.....	10,644		
	Mo do.			4,453	.....	4,453		
	Jaldaka do.			14,874	.....	14,874		
	Nar do.			10,093	.....	10,093		
	Dalingkot do.			6,561	.....	6,561		
	Mal do.			5,493	.....	5,493		
	Total ...	.....	97,704	98,211	.....	98,211	349	
Kurseong Sub-division (Darjeeling Division).	Kurseong Range—							
	Dhobijhora forest	1882-83	589	589	4	585	34	Ditto ditto.
	Babukhola do.	1882-83	1,840	1,840	.....	1,840		
	Sibakhola do.	1882-83	408	408	.....	408		
	Paglajhora do.	1882-83	35	35	.....	35		
	Balasan Range—							
	Koohoin forest	1882-83	514	514	.....	514		
	Total ...	.....	3,386	3,386	4	3,382	34	
Julpigori Division.	Falakata Range—							
	Salbari forest	1882-83	12	12	.....	12	9	
Singbhum Sub-division (Chota Nagpore Division).	Ranchi Range—							
	Horhap forest	1886-87	.....	1,098	.....	1,098	2	
	Total Head II ...	.....	106,475	168,240	4	168,236	451	
	III.—Areas liable to be burnt, but for which no special measures were adopted, including those fired purposely with the view to protecting others.							
Buxa Division	Borojhar Range—							
	Borojhar forest (part) ...	.....	2,000	2,000	2,000	.....	.....	Fired purposely with the view to protecting other areas.
	Buxa Range—							
	Hill forests block (part) ...	.....	40	40	40	.....	.....	
	Total ...	.....	2,040	2,040	2,040	.....	.....	

Form No. 51.

FOREST DEPARTMENT, BENGAL.

Area of Forest Tracts protected from Fire during the dry season 1887 *to accompany Report for* 1886-87—(concluded).

Divisions and Sub-divisions.	Forest Tracts.	Year in which protection commenced.	Area actually protected up to 31st May 1886.	During dry season of 1887.			Cost during the season, up to 31st May 1887.	Remarks.
				Area attempted to be protected.	Failures.	Actually protected.		
	III.—Areas liable to be burnt, but for which no special measures were adopted, including those fired purposely with the view to protecting others—concluded.		Acres.	Acres.	Acres.	Acres.	Rs.	
Singbhum Sub-division (Chota Nagpore Division).	Saranda Range— Saranda forest (part) ...	.....	.....	145,340	145,340	.....	.....	No special measures adopted.
	Chyebasa Range— Santara block	.....	.....	46,080	46,080	.....	.....	
	Kolhan Range— Latua block	.....	.....	44,800	44,800	.....	.....	
	Total ...	.....	.....	236,220	236,220	.....	.....	
	Total Head III ...	.....	2,040	238,260	238,260	.....	.....	
	IV.—Areas usually free from fires for which it is not considered necessary to take any measures.							
Buxa Division	Borojhar Range— Borojhor forest (part) ...	.....	17,200	17,200	.....	17,200	.....	
	Butri ditto ...	.....	1,400	1,400	.....	1,400	.....	
	Gabur Basra forest ...	.....	6,400	6,400	.....	6,400	.....	
	Buxa Range— Hill forests block (part) ...	.....	20,020	20,020	.....	20,020	.....	
	Haldibari Range— Baidak forest (part) ...	.....	6,400	6,400	.....	6,400	.....	
	Mahakalguri forest ...	.....	215	.....	.....	.....	.....	
	Total ...	.....	51,635	51,420	...	51,420	.....	
Sunderbunds Division.	Satkhira forest	.....	244,480	244,480	.....	244,480	.....	
	Khulna do.	.....	447,353	447,353	.....	447,353	.....	
	Bagirhat do.	.....	320,000	320,000	.....	320,000	.....	
	Total ...	.....	1,011,833	1,011,833	.....	1,011,833	.....	
Chittagong Division.	Kassalong forest	.....	488,320	488,320	.....	488,320	.....	
	Sitapahar forest (part) ...	.....	7,020	6,549	.....	6,949	.....	
	Matamori forest	.....	160,640	160,640	.....	160,640	.....	
	Bungoo do.	.....	93,190	93,190	.....	93,190	.....	
	Rinkheong do.	.....	137,570	137,570	.....	137,570	.....	
	Total ...	.....	886,740	886,269	.....	886,269	.....	
	Total Head IV ...	.....	1,950,208	1,949,522	.....	1,949,522	.....	
	Grand Total ...	.....	2,782,880*	3,195,065*	348,171	2,846,894*	14,378	

* Includes 3,840 acres, the area of the Birda block (proposed reserve), Singbhum sub-division, which was protected by special measures.

Note.—This form is for the dry season, and not for the financial year, and therefore the date up to which expenditure is included must be filled in to suit the circumstances of each circle.

Form No. 52.

FOREST DEPARTMENT, BENGAL.

Area of Plantations, 1886-87.

Division or Sub-division.	Name of Plantation.	Area in Acres.				Receipts of the year.	Charges of the year.	Remarks.
		On 1st April 1886.	Added during the year.	Excluded during the year.	Area on 31st March 1887.			
	Regular Plantations.					Rs.	Rs.	
Darjeeling Sub-division.	Rangbul block	281	.....	.....	281	.....	134	
	Dooferia do.	165	48	.....	213	.....	777	
	Tunsong do.	104	.....	.....	104	.....	191	
	Rangnu do.	139	.....	.....	139	.....	11	
	Rangirum do.	40	.....	.....	40	.....	25	
	Poomong do.	53	50	.....	103	.....	579	
	Goom do.	150	.....	.....	150	.....	125	
	Total ...	931	98	.....	1,029	.....	1,842	
Kurseong Sub-division.	Dhobijhora block	13	.....	.....	13	.....	.....	
	Ditto compartments 5 & 6	23	.....	.....	23	.....	.....	
	Ditto ditto 1 to 4	.....	.....	.....	.....	.....	.....	
	Ramonpokri block	433	1	.....	434	.....	122	
	Sukna do.	7	.....	.....	7	.....	.....	
	Siligori	13	.....	.....	13	.....	88	
	Chamta block, compartment 5	2	.....	.....	2	.....	15	
	Ditto ditto 1	100	.....	.....	100	.....	12	
	Ditto ditto 1	10	2	.....	12	.....	152	
	Ditto ditto 3	54	.....	.....	54	.....	.....	
	Kynanuka ditto 2	2	.....	.....	2	.....	12	
	Adalpur ditto 2	.....	52	.....	52	.....	245	
	Shalibhita ditto	.....	.....	.....	.....	.....	... ...	
	Total ...	656	55	.....	711	.....	646	

FORM No. 52.

FOREST DEPARTMENT, BENGAL.

Area of plantations, 1886-87—(continued).

DIVISION OR SUB-DIVISION.	Name of Plantation.	AREA IN ACRES. On 1st April 1886.	Added during the year.	Excluded during the year.	Area on 31st March 1887.	Receipts of the year.	Charges of the year.	REMARKS.
						Rs.	Rs.	
Julpigori Division	Falakata	3	.....	.....	3	.....	.....	
Chittagong Division.	Pahartalli	5	.....	.....	5	.....	.....	
	Sitapahar	450*	61	.....	511	.....	3,007	* Includes 40 acres omitted; see paragraph 60 of report 1885-86.
	Total ...	455	61	.....	516	.....	3,007	
Khorda Sub-division (Orissa Division).	Bornai hill†	.....	.....	.....	.....	.....	.....	† Incorrectly entered in form for 1885-86, and former reports.
	Barunai ,, ...	130	56	.....	186	.....	1,110‡	
	Chandmari	15	.....	.....	15	.....	26	
	Total ...	145	56	.....	201	.....	1,136	‡ Including nurseries.
	Total regular plantations ...	2,190*	270	.....	2,460	.....	6,631	
	Cultural operations.							
Darjeeling Sub-division.	Sepoydhura block	18	6	.....	24	.....	109	
Kurseong Sub-division.	Dhobijhora block	210	.....	.....	210	.....	82	
	Chanta do.	11	.....	.....	11	.....	.....	
	Sukna do.	2	.....	.....	2	.....	30	
	Champasari do.	.....	.....	.....	.....	.....	19	
	Harlia do.	10	.....	.....	10	.....	.....	
	Tukriajhar do.	1	.....	.....	1	.....	.....	
	Manjua do.	.....	.....	.....	.....	.....	.....	
	Rakti do.	53	.....	.....	53	.....	8	
	Miscellaneous	8	.....	.....	8	.....	6	
	Total ...	295	.....	.....	295	.....	145	
Buxa Division ...	Rajabhatkawa block, compartment 25	19	.....	.....	19	.....	.....	
	Ditto ditto ... 26	511	.....	.....	511	.....	.....	
	Ditto ditto ... 24	1	.....	.....	1	.....	.....	
	Ditto ditto ... 21	47	.....	.....	47	.....	23	
	Ditto ditto ... 23	19	.....	.....	19	.....	.....	
	Ditto ditto ... 15	.....	1	.....	1	.....	213	
	Poro block	21	.....	.....	21	.....	.....	
	Total ...	618	1	.....	619	.....	236	
Chota Nagpore Division.	Head-quarters	.....	.....	.....	.....	.....	70	Mahogany.
Palamow Sub-division.	Betlah block	.....	.....	.....	.....	.....	28	Ditto.
Hazaribagh Sub-division.	Koderma	.....	.....	.....	.....	.....	15	Ditto.
Singbhoom Sub-division.	Head-quarters	.....	.....	.....	.....	.....	22	Ditto.
Orissa Division—								
Angul Sub-division.	Bichundabhogra	.....	.....	.....	.....	.....	128	78 acres reported failure.
	Tikarpara	.....	2	.....	2	.....	7	
Khorda Sub-division.	Chandka block	.....	10	.....	10	.....	70	
	Total ...	.....	12	.....	12	.....	205	
	Total cultural operations ...	931	19	.....	950	.....	829	
	GRAND TOTAL ...	3,121	289	.....	3,410	.....	7,460	

FORM No. 53.

FOREST DEPARTMENT, BENGAL.

Trees felled or girdled by Government Agency during the year 1886-87. *(Selection fellings.)*

Division.	Trees felled or girdled. Description.	Number.
	Darjeeling Sub-division.	
Darjeeling	Champ	7
	Búk	10
	Kawala	6
	Katus	1
	Phalat	22
	Lali	7
	Birch	1
	Rhododendron	1
	Total ...	55
	Teesta Sub-division.	
	Champ	1
	Katus	33
	Saj	1
	Panisaj	2
	Total ...	37
	Kurseong Sub-division.	
	Champ	2
	Búk	2
	Gobria	1
	Bungi	4
	Total ...	9
Julpigori	Sál	100
	Sissu	7
	Sál poles (dry)	30
	Total ...	137
Buxa	Sál	1,810
	Total ...	1,810
	Singbhoom Sub-division.	
Chota Nagpore	Sál (green)	624
	Do. (dry)	186
	Korum	7
	Peasal	1
	Gamhar	1
	Hessel	43
	Total ...	862
	GRAND TOTAL ...	2,910

FORM No. 53.

FOREST DEPARTMENT, BENGAL.

Trees felled or girdled by Government Agency during the year 1886-87. (*Selection fellings*)—(concluded.)

DIVISION.	TREES FELLED OR GIRDLED.	
	Description.	Number.
	Abstract of the Circle.	
	Sál (green)	2,534
	Do. (dry)	216
	Champ	10
	Búk	12
	Phalat	22
	Katus	34
	Kawala	6
	Lali	7
	Gobria	1
	Birch	1
	Rhododendron	1
	Saj	1
	Panisaj	2
	Bungi	4
	Sissu	7
	Korum	7
	Peasal	1
	Gamhar	1
	Hessel	43
	Total ...	2,910

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Out-turn of Timber and Firewood during the year 1886-87.

DIVISION.	DESCRIPTION OF MATERIALS.	OUT-TURN IN CUBIC FEET.							REMARKS.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government Agency.	Removed by Purchasers.	Removed by Free grants.	Removed by Right holders.	
					I.—RESERVED FORESTS.					
	Scantling.				TIMBER.					
Darjeeling Subdivision (Darjeeling Division).	Phalat shingles	9,750	.....	.....	9,750	9,750	.....	.....	.....	The following equivalent has been taken:— 1 tree = 250 cubic feet.
	Búk scantling	354	.....	.....	354	354	.....	.....	.....	
	Champ ditto	257	.....	.....	257	257	.....	.....	.....	
	Katus ditto	35	.....	.....	35	35	.....	.....	.....	
	Lali ditto	292	.....	.....	292	292	.....	.....	.....	
	Kawala ditto	252	.....	.....	252	252	.....	.....	.....	
	Phalat ditto	12	.....	.....	12	12	.....	.....	.....	
	Birch ditto	14	.....	.....	14	14	.....	.....	.....	
	Rhododendron	14	.....	.....	14	14	.....	.....	.....	
	Total scantling ...	10,980	.....	.....	10,980	10,980	.....	.....	.....	
	Trees.									
	Champ	8,500	.....	.....	8,500	.....	8,500	.....	.....	
	Búk	14,500	.....	.....	14,500	.....	14,500	.....	.....	
	Katus	1,500	.....	.....	1,500	.....	1,500	.....	.....	
	Chilauni	4,750	.....	.....	4,750	.....	4,750	.....	.....	
	Kawala	6,750	.....	.....	6,750	.....	6,750	.....	.....	
	Tarsing	2,750	.....	.....	2,750	.....	2,750	.....	.....	
	Kharani	250	.....	.....	250	.....	250	.....	.....	
	Kabashi	500	.....	.....	500	.....	500	.....	.....	
	Angaria	250	.....	.....	250	.....	250	.....	.....	
	Bhadresi	250	.....	.....	250	.....	250	.....	.....	
	Arupati	500	.....	.....	500	.....	500	.....	.....	
	Lali	2,000	.....	.....	2,000	.....	2,000	.....	.....	
	Mahua	1,250	.....	.....	1,250	.....	1,250	.....	.....	
	Pipli	250	.....	.....	250	.....	250	.....	.....	
	Kharani (poles)	75	.....	.....	75	.....	75	.....	.....	
	Total Trees ...	44,075	.....	.....	44,075	.....	44,075	.....	.....	

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Out-turn of Timber and Firewood during the year 1886-87—(continued.)

Division.	Description of Materials.	Out-turn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government Agency.	Purchasers.	Free grants.	Right holders.	
	Dry Timber.									
Darjeeling Subdivision (Darjeeling Division).	Champ logs, dry wood ...	.....	5,804	.....	5,804	.....	5,804	.....	.....	
	Ruk do., do. ...	.....	2,686	.....	2,686	.....	2,686	.....	.....	
	Katus do., do. ...	.....	3,352	.....	3,352	.....	3,352	.....	.....	
	Chilauni do., do. ...	.....	1,387	.....	1,387	.....	1,387	.....	.....	
	Gobria do., do. ...	.....	540	.....	540	.....	540	.....	.....	
	Kawala do., do. ...	.....	856	.....	856	.....	856	.....	.....	
	Lali do., do. ...	.....	537	.....	537	.....	537	.....	.....	
	Bhadrasi do., do. ...	.....	54	.....	54	.....	54	.....	.....	
	Kharani do., do. ...	.....	99	.....	99	.....	99	.....	.....	
	Myah do., do. ...	.....	127	.....	127	.....	127	.....	.....	
	Kabasbi do., do. ...	.....	212	.....	212	.....	212	.....	.....	
	Padam do., do. ...	.....	90	.....	90	.....	90	.....	.....	
	Mahua do., do. ...	.....	549	.....	549	.....	549	.....	.....	
	Phalat do., do. ...	.....	128	.....	128	.....	128	.....	.....	
	Arupati do., do. ...	.....	342	.....	342	.....	342	.....	.....	
	Palli do., do. ...	.....	200	.....	200	.....	200	.....	.....	
	Tarsing do., do. ...	.....	767	.....	767	.....	767	.....	.....	
	Harray do., do. ...	.....	67	.....	67	.....	67	.....	.....	
	Dudabi do., do. ...	.....	95	.....	95	.....	95	.....	.....	
	Mulagiri do., do. ...	.....	98	.....	98	.....	98	.....	.....	
	Sisi do., do. ...	.....	61	.....	61	.....	61	.....	.....	
	Putli do., do. ...	.....	92	.....	92	.....	92	.....	.....	
	Total Dry Timber ...	.....	18,123	.....	18,123	.....	18,123	.....	.....	
	Scantling.									
	Katus shingles	3,750	.....	.....	3,750	3,750	.....	.....	.....	
	Beams and planks	125	.....	.....	125	.....	125	.....	.....	
	Total Scantling ...	3,875	.....	.....	3,875	3,875	.....	.....	.....	
	Trees.									
Terai Subdivision (Darjeeling Division).	Sál	21,500	.....	.....	21,500	.....	21,500	.....	.....	The following equivalent has been taken:— 1 tree = 250 cubic feet.
	Lampatia	31,750	.....	.....	31,750	.....	31,750	.....	.....	
	Champ	1,040	.....	.....	1,040	40	1,000	.....	.....	
	Sáj	1,050	.....	.....	1,050	.....	1,050	.....	.....	
	Panisaj	12,500	.....	.....	12,500	.....	12,500	.....	.....	
	Tún	4,000	.....	.....	4,000	.....	4,000	.....	.....	
	Kimbu	2,500	.....	.....	2,500	.....	2,500	.....	.....	
	Jeepshi	250	.....	.....	250	.....	250	.....	.....	
	Walnut	250	.....	.....	250	.....	250	.....	.....	
	Chilauni	2,750	.....	.....	2,750	.....	2,750	.....	.....	
	Goguldhup	250	.....	.....	250	.....	250	.....	.....	
	Miscellaneous poles	200	.....	.....	200	.....	200	.....	.....	
	Total Trees ...	78,040	.....	.....	78,040	40	78,000	.....	.....	
	Dry Timber.									
	Sál logs, dry wood ...	.....	354	.....	354	45	309	.....	.....	
	Lampatia do., do. ...	.....	645	.....	645	.....	645	.....	.....	
	Sáj do., do. ...	.....	189	.....	189	.....	189	.....	.....	
	Panisaj do., do. ...	.....	116	.....	116	.....	116	.....	.....	
	Tún do., do. ...	.....	44	.....	44	.....	44	.....	.....	
	Total Dry Timber ...	.....	1,348	.....	1,348	45	1,303	.....	.....	
	Drift Wood.									
	Logs	.....	85	.....	85	.....	85	.....	.....	
	Poles	.....	345	.....	345	280	65	.....	.....	
	Total Drift Wood ..	.....	430	.....	430	280	150	.....	.....	
	Scantling.									
	Champ scantling	279	.....	.....	279	279	.....	.....	.....	
	Sál do.	.....	9	.....	9	9	.....	.....	.....	
	Bungi shingles	1,000	.....	.....	1,000	1,000	.....	.....	.....	
	Ruk do.	750	.....	.....	750	750	.....	.....	.....	
	Total Scantling ...	2,029	9	.....	2,038	2,038	.....	.....	.....	
	Trees.									
Kurseong Subdivision (Darjeeling Division).	Ruk	2,500	.....	.....	2,500	.....	2,500	.....	.....	The following equivalent has been taken:— 1 tree = 250 cubic feet.
	Tún	1,250	.....	.....	1,250	.....	1,250	.....	.....	
	Sál	4,250	.....	.....	4,250	.....	4,250	.....	.....	
	Sáj	3,250	.....	.....	3,250	.....	3,250	.....	.....	
	Panisaj	7,750	.....	.....	7,750	.....	7,750	.....	.....	
	Simal	4,500	.....	.....	4,500	.....	4,500	.....	.....	
	Lampatia	36,250	.....	.....	36,250	.....	36,250	.....	.....	
	Chilauni	4,250	.....	.....	4,250	.....	4,250	.....	.....	
	Champ	1,250	.....	.....	1,250	.....	1,250	.....	.....	
	Siam	4,750	.....	.....	4,750	.....	4,750	.....	.....	
	Goguldhup	4,000	.....	.....	4,000	.....	4,000	.....	.....	
	Mandania	1,000	.....	.....	1,000	.....	1,000	.....	.....	
	Mainakat	2,500	.....	.....	2,500	.....	2,500	.....	.....	
	Kanjal	250	.....	.....	250	.....	250	.....	.....	
	Sauer	250	.....	.....	250	.....	250	.....	.....	
	Others	5,500	.....	.....	5,500	.....	5,500	.....	.....	
	Miscellaneous poles	296	.....	.....	296	296	.....	.....	.....	
	Sál poles	351	.....	.....	351	351	.....	.....	.....	
	Do. posts	50	.....	.....	50	50	.....	.....	.....	
	Total Trees ...	84,197	.....	.....	84,197	697	83,500	.....	.....	

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Out-turn of Timber and Firewood during the year 1886-87—(continued).

Division.	Description of Materials.	Out-turn in cubic feet.								Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by				
						Government agency.	Purchasers	Free grants.	Right holders.	
	Dry Timber.									
Kurseong Sub-division (Darjeeling Division)—*concld.*	Sál poles	.....	220	.....	220	.....	220	.....	.....	1 Pole = 10 cubic feet.
	Other poles	.....	10	.....	10	.....	10	.....	.....	
	Dry timber	.....	2,465	.....	2,465	.....	2,465	.....	...	
	Drift do.	.....	1,043	.....	1,043	292	751	.....	.....	
	Total Dry Timber	.....	3,738	.....	3,738	292	3,446	.....	.....	
	Trees.									
	Sál	5,904	.....	.....	5,904	3,744	2,160	.....	.....	The following equivalents have been taken :—
	Sissu	600	.....	.....	600	.....	600	.....	.....	C. ft.
	Lampatia	120	.....	.....	120	.....	120	.....	.....	1 Tree = ... 120
	Sál poles	16,905	.....	.....	16,905	150	16,455	.....	.....	1 Sál pole = ... 5
	Sissu poles	68	.....	.....	68	.....	68	.....	.....	1 Khair or Sissu pole = 2
	Khair do.	100	.....	.....	100	.....	100	.....	.....	
	Total Trees	23,897	.....	.....	23,897	3,894	19,503	.....	.....	
	Drift Timber.									
Julpigori Division.	Sál logs—Drift	.....	2,023	.....	2,023	2,023	.....	.....	.....	
	Bohir do.—Do.	.....	40	.....	40	.....	40	.....	.....	
	Jhow do.—Do.	.....	105	.....	105	.....	105	.....	.....	
	Do. trees—Do.	.....	4,200	.....	4,200	.....	4,200	.....	.....	
	Dhouli do.—Do.	.....	240	.....	240	.....	240	.....	.....	
	Bahera do.—Do.	.....	480	.....	480	.....	480	.....	.....	
	Gamhari do.—Do.	.....	120	.....	120	.....	120	.....	.....	
	Amri do.—Do.	.....	120	.....	120	.....	120	.....	.....	
	Sál poles—Do.	.....	245	.....	245	.....	245	.....	.....	
	Sissu do.—Do.	.....	142	.....	142	.....	142	.....	.....	
	Karni do.—Do.	.....	8	.....	8	.....	8	.....	.....	
	Total Drift Timber	.....	8,323	.....	8,323	2,023	5,700	.....	.....	
	Scantling.									
	Sál scantling	318	.....	.....	318	.....	.....	318	.....	
	Trees.									
	Sál	2,250	.....	.....	2,250	.....	2,250	.....	.....	The following equivalents have been taken for trees other than those removed by Government agency :—
	Do.	74,562	.....	.....	74,562	74,562	.....	.....	.....	C. ft.
	Sissu	600	.....	.....	600	.....	600	.....	.....	1 Tree = ... 150
	Chilauni	150	.....	.....	150	.....	150	.....	.....	1 Sál Kalakhamba = 10
	Champ	1,200	.....	.....	1,200	.....	1,200	.....	.....	1 Other ditto = ... 5
Buxa Division	Sál Kalakhambas	13,470	.....	.....	12,470	.....	12,070	400	.....	
	Sissu ditto	1,110	.....	.....	1,110	.....	710	400	.....	
	Total Trees	92,342	.....	.....	92,342	74,562	16,980	800	.....	
	Dry Timber.									
	Sál logs	.....	498	.....	498	498	.....	.....	.....	
	Do. posts	960	.....	.....	960	960	.....	.....	.....	
	Total Dry Timber	960	498	.....	1,458	1,458	.....	.....	.....	
Hazaribagh Sub-division (Chota Nagpur Division).	Sál poles—Dry	2,062	.....	.....	2,062	.....	2,062	.....	.....	
	Scantling.									
	Sál sleepers	2,697	.....	.....	2,697	2,697	.....	.....	.....	
	Do. other scantling	462	.....	.....	462	462	.....	.....	.....	
	Do. beams and slabs	825	.....	.....	825	617	208	.....	.....	
	Other beams	84	.....	.....	84	84	.....	.....	.....	
Singbhoom Sub-division (Chota Nagpur Division).	Total Scantling	4,068	.....	.....	4,068	3,860	208	.....	.....	
	Trees.									
	Panan	20	.....	.....	20	.....	20	.....	.....	
	Sál poles	7,149	.....	.....	7,149	2,130	4,654	365	.....	
	Hessel do.	75	.....	.....	75	71	4	.....	.....	
	Total Trees	7,244	.....	.....	7,244	2,201	4,678	365	.....	
	Timber.									
	Sundri logs and timber	3,992,474	.....	.....	3,992,474	1,776	3,990,698	.....	.....	In calculating the volume, 1 maund is taken as = 1⅔ c. ft.
	Do. poles	53	.....	.....	53	53	.....	.....	.....	
	Pussur logs and posts	122,302	.....	.....	122,302	448	121,754	.....	.....	The 2,393 c. ft. shown as removed by Government agency are drift and confiscated wood.
	Goran posts	1,345,211	.....	.....	1,345,211	54	1,345,157	.....	.....	
	Amoor do.	44,195	.....	.....	44,195	8	44,187	.....	.....	
	Kakra do.	35,542	.....	.....	35,542	1	35,541	.....	.....	
	Ora	452	.....	.....	452	20	432	.....	.....	
Sunderbuns Division (reserved forests).	Gewa posts	20,045	.....	.....	20,045	13	20,032	.....	.....	
	Teak-wood	20	.....	.....	20	20	.....	.....	.....	
	Kirpa posts	65,537	.....	.....	65,537	.....	65,537	.....	.....	
	Keora logs and timber	245,376	.....	.....	245,376	.....	245,376	.....	.....	
	Dhundul posts	118,897	.....	.....	118,897	.....	118,897	.....	.....	
	Bani timber	9,135	.....	.....	9,135	.....	9,135	.....	.....	
	Sundri masts	2,847	.....	.....	2,847	.....	2,847	.....	.....	
	Do. posts	74,648	.....	.....	74,648	.....	74,648	.....	.....	
	Bhadal do.	5,537	.....	.....	5,537	.....	5,537	.....	.....	
	Total Timber	6,082,171	.....	.....	6,082,171	2,393	6,079,778	.....	.....	

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Out-turn of Timber and Firewood during the year 1886-87—*(continued.)*

DIVISION.	DESCRIPTION OF MATERIALS.	OUT-TURN IN CUBIC FEET.							REMARKS.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government agency.	Purchasers.	Free grants.	Right holders.	
	Timber—concld.									
Chittagong Division (reserved forests.)	Bahal log	40	.....	.....	40	.....	40	.....	.....	
	Jarul ,,	830	.....	.....	830	830	.....	.....	.....	
	House posts	86	.....	.....	86	.....	86	.....	.....	
	Saplings	854	.....	.....	854	.....	854	.....	.....	
	Total Timber	1,810	.....	.....	1,810	830	980	.....	.....	
Orissa Division (reserved forests).	Sál logs	.....	8,652	.....	8,652	8,652	.....	.....	.....	The following equivalents have been adopted :— 1 Tree=40 c. ft. 1 Gyal=2 c. ft.
	Gyals and dundas	.....	568	.....	568	568	.....	.....	.....	
	Sissu trees	.....	120	.....	120	.....	120	.....	.....	
	Total Timber	.....	9,340	.....	9,340	9,220	120	.....	.....	
	Total Timber, Reserved Forests	6,437,568	41,809	.....	6,479,377	719,288	6,558,606	1,483	.....	
	Fuel.									
Darjeeling Subdivision (Darjeeling Division).	Charcoal	4,751	.....	153,855	158,606	158,606	.....	.....	.....	1 Maund firewood=1¼ c. ft. solid wood. 1 Maund charcoal=7 c. ft. solid wood. The thinnings are regeneration fellings. Dry wood instead of being shown, as last year, under Clearances, is shown more appropriately under Selection fellings in this return.
	Firewood	38,809	.....	70,380	109,279	109,279	.....	.....	.....	
	Charcoal	2,940	.....	94,101	97,041	.....	97,041	.....	.....	
	Firewood	159,636	.....	64,173	223,808	.....	223,371	437	.....	
	Ditto, dry sticks	....	.....	735	735	.....	735	.....	.....	
	Ditto, brick-burning wood	6,087	.....	.....	6,087	.....	6,087	.....	.....	
	Total	192,265	.....	383,241	575,506	267,885	307,184	437	.....	
Teesta Sub-division (Darjeeling Division).	Charcoal	49,245	.....	.....	49,245	.....	49,245	.....	.....	
	Firewood	61,005	1,601	.....	62,606	.....	62,431	175	.....	
	Ditto, drift	.....	21,051	.....	21,051	.....	21,051	.....	.....	
	Total	110,250	22,652	.....	132,902	.....	132,727	175	.....	
Kurseong Subdivision (Darjeeling Division).	Firewood	175	65,832	81,052*	147,059	9,538	128,161	.....	.....	* Includes 20,000 c. ft., the out-turn of regeneration fellings, part of a quantity of 35,000 sold; the balance being uncut up to the close of the year.
	Ditto, drift	.....	12,743	.....	12,743	.....	12,743	.....	.....	
	Total	175	78,575	81,052	160,402	9,538	150,864	.....	.....	
Jalpigori Division.	Firewood	61,794	.....	.....	61,794	.....	61,794	.....	.....	
	Ditto, drift	.....	34,058	.....	34,058	2,362	31,696	.....	.....	
	Total	61,794	34,058	.....	95,852	2,362	93,490	.....	.....	
Buxa Division	Firewood	5,372	.....	.....	5,372	.....	5,372	.....	.....	
Hazaribagh Sub-division (Chota Nagpore Division).	Firewood	8,050	.....	.....	8,050	.....	8,050	.....	.....	
Singbhoom Sub-division (Chota Nagpore Division).	Charcoal	1,080	.....	.....	1,080	1,071	9	.....	.....	
	Ditto, confiscated	7	.....	.....	7	.....	7	.....	.....	
	Firewood	37,975	.....	.....	37,975	19,677	7,903	10,395	.....	
	Ditto, confiscated	163	.....	.....	163	.....	163	.....	.....	
	Total	39,225	.....	.....	39,225	20,748	8,082	10,395	.....	
Sunderbuns Division (reserved forest).	Firewood—Sundri	3,655,407	.....	.....	3,655,407	.....	3,655,407	.....	.....	
	Firewood—Other	5,885,618	.....	.....	5,885,618	101	5,885,517	.....	.....	These 101 c. ft. are of confiscated firewood.
	Total	9,541,025	.....	.....	9,541,025	101	9,540,924	.....	.....	
Orissa Division (reserved forests).	Firewood	.....	3,549	71,190	74,739	3,493	71,246	.....	.....	
	Total Fuel, Reserved Forests	9,958,166	138,634	536,083	10,633,073	304,127	10,317,939	11,007	.....	
	II.—PROTECTED FORESTS.									
	Timber.									
Sunderbuns Division.	Sundri timber	100	.....	.....	100	.....	100	.....	.....	
	Do. posts	59	.....	.....	59	.....	59	.....	.....	
	Passur ditto	36,576	.....	.....	36,576	.....	36,576	.....	.....	
	Goran ditto	213,647	.....	.....	213,647	.....	213,647	.....	.....	
	Keora timber	14,798	.....	.....	14,798	.....	14,798	.....	.....	
	Kirpa posts	70,175	.....	.....	70,175	.....	70,175	.....	.....	
	Kakra ditto	831	.....	.....	831	.....	831	.....	.....	
	Bani timber	700	.....	.....	700	.....	700	.....	.....	
	Gewa posts	569	.....	.....	569	.....	569	.....	.....	
	Dhundul ditto	831	.....	.....	831	.....	831	.....	.....	
	Dhaula ditto	4,200	.....	.....	4,200	.....	4,200	.....	.....	
	Total Green Timber and Poles	342,485	.....	.....	342,485	.....	342,485	.....	.....	

FORM No. 54.

FOREST DEPARTMENT, BENGAL.

Out-turn of timber and firewood during the year 1886-87—*(concluded.)*

Division.	Description of Materials.	Out-turn in Cubic Feet.							Remarks.
		Selection fellings.	Clearances.	Thinnings.	Total.	Removed by Government Agency.	Removed by Purchasers.	Free grants.	Right holders.	
Orissa Division	Jam trees	.....	120	.....	120	.....	120	.....	.....	
	Phasi do.	.....	40	.....	40	.....	40	.....	.....	
	Simul do.	.....	120	.....	120	.....	120	.....	.....	
	Kahera do.	.....	120	.....	120	.....	120	.....	.....	
	Handara do.	.....	40	.....	40	.....	40	.....	.....	
	Banta poles	.....	10	.....	10	.....	10	.....	.....	
	Total trees	.....	450	.....	450	.....	450	.....	.....	
	Sál timber, dry	.....	513	.....	513	.....	513	.....	.....	
	Sal posts	.....	349	.....	349	16	333	.....	.....	
	Miscellaneous do. dry	.....	920	.....	920	.....	.....	920	.....	
	Halauda timber do.	.....	56	.....	56	.....	56	.....	.....	
	Total dry timber	.....	1,838	.....	1,838	16	902	920	.....	
	Total timber, Protected Forests	342,485	2,288	.....	344,773	16	343,837	920	.....	
	Fuel.									
Sunderbuns Division.	Firewood ... Sundri	17,836	.....	.....	17,836	.....	17,836	.....	.....	
	Firewood ... Other	634,970	.....	.....	634,970	.....	634,970	.....	.....	
	Total	652,806	.....	.....	652,806	.....	652,806	.....	.....	
Orissa Division	Charcoal	.....	58,144	.....	58,144	.....	58,144	.....	.....	
	Firewood	.....	5,980,882	.....	5,980,882	.....	5,980,882	.....	.....	
	Total	.....	6,039,026	.....	6,039,026	.....	6,039,026	.....	.....	
	Total fuel, Protected Forests	652,806	6,039,026	.....	6,691,832	.....	6,691,832	.....	.....	
	Timber.	III.—UNCLASSED STATE FORESTS AND WASTE LAND								
Chittagong Division.	Chapalish boats	55,040	.....	.....	55,040	1,600	53,440	.....	.....	Eighty cubic feet are taken as the volume of an average boat. Ten cubic feet are taken as the volume of an average log. Two cubic feet are taken as the volume of an average post. One cubic foot is taken as the volume of an average sapling. The timber shown as removed by Government Agency was all drift or confiscated.
	Telsur do.	11,680	.....	.....	11,680	480	11,200	.....	.....	
	Boilsur do.	1,680	.....	.....	1,680	560	1,120	.....	.....	
	Kandeb do.	16,240	.....	.....	16,240	160	16,080	.....	.....	
	Gamhar do.	2,320	.....	.....	2,320	80	2,240	.....	.....	
	Tejbahal do.	5,680	.....	.....	5,680	.....	5,680	.....	.....	
	Pitraj do.	24,880	.....	.....	24,880	880	24,000	.....	.....	
	Gurjun do.	80	.....	.....	80	80	.....	.....	.....	
	Sampan do.	80	.....	.....	80	80	.....	.....	.....	
	Kasturi do.	80	.....	.....	80	80	.....	.....	.....	
	Other do.	56,560	.....	.....	56,560	2,000	54,560	.....	.....	
	Jarul logs	1,910	.....	.....	1,910	.....	1,910	.....	.....	
	Chapalish do.	4,360	.....	.....	4,360	120	4,240	.....	.....	
	Gamhar do.	4,120	.....	.....	4,120	120	4,000	.....	.....	
	Chikarasi do.	210	.....	.....	210	.....	210	.....	.....	
	Gurjun do.	900	.....	.....	900	20	880	.....	.....	
	Kandeb do.	630	.....	.....	630	10	620	.....	.....	
	Tun do.	70	.....	.....	70	40	30	.....	.....	
	Telsur do.	70	.....	.....	70	10	60	.....	.....	
	Other do.	32,990	.....	.....	32,990	330	32,660	.....	.....	
	Nag. sur do.	10	.....	.....	10	10	.....	.....	.....	
	Pitraj do.	10	.....	.....	10	10	.....	.....	.....	
	Teak do.	10	.....	.....	10	10	.....	.....	.....	
	Tali do.	20	.....	.....	20	20	.....	.....	.....	
	Cotton do.	30	.....	.....	30	30	.....	.....	.....	
	Behal do.	90	.....	.....	90	40	50	.....	.....	
	Jarul planks	608	.....	.....	608	.....	608	.....	.....	
	Gamhar do.	312	.....	.....	312	.....	312	.....	.....	
	Gurjun do.	1,338	.....	.....	1,338	5	1,333	.....	.....	
	Chapalish do.	1	.....	.....	1	.....	1	.....	.....	
	Other do.	1,341	.....	.....	1,341	3	1,338	.....	.....	
	Goda and Horingdhaki	112	.....	.....	112	.....	112	.....	.....	
	House posts	11,248	.....	.....	11,248	6	11,242	.....	.....	
	Saplings	11,547	.....	.....	11,547	.....	11,547	.....	.....	
	Total Timber—Unclassed State Forests	246,257	.....	.....	246,257	6,784	239,473	.....	.....	
Chittagong Division.	Firewood	89,781	.....	.....	89,781	128	89,653	.....	.....	
		ABSTRACT OF THE CIRCLE.								
Reserved forests.	Timber in scantling	21,270	9	.....	21,279	20,753	208	318	.....	
	" trees and poles	6,415,538	9,340	.....	6,424,878	93,837	6,329,676	1,105	.....	
	Dry timber	960	23,707	.....	24,667	1,795	22,872	.....	.....	
	Drift "	.....	8,753	.....	8,753	2,903	5,850	.....	.....	
	Total timber	6,437,568	41,809	.....	6,479,377	119,288	6,358,606	1,483	.....	
	Total fuel	9,968,156	138,834	536,083	10,638,073	304,127	10,317,939	11,007	.....	
Protected forests.	Timber in trees and poles	342,485	450	.....	342,935	.....	342,935	.....	.....	
	Dry timber	.....	1,838	.....	1,838	16	902	920	.....	
	Total timber	342,485	2,288	.....	344,773	16	343,837	920	.....	
	Total fuel	652,806	6,039,026	.....	6,691,832	.....	6,691,832	.....	.....	
Unclassed State forests and waste lands.	Total timber	246,257	.....	.....	246,257	6,784	239,473	.....	.....	
	Total fuel	89,781	.....	.....	89,781	128	89,653	.....	.....	
	GRAND TOTAL TIMBER	7,026,310	44,097	.....	7,070,407	126,088	6,941,916	2,403	.....	
	DITTO FUEL	10,700,748	6,177,860	536,083	17,414,686	304,255	17,099,424	11,007	.....	
	GRAND TOTAL CUBIC FEET WOOD.	17,727,058	6,221,957	536,083	24,485,093	430,343	24,041,340	13,410	.....	

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Out-turn of Minor Forest Produce during the year 1886-87.

DIVISION.	DESCRIPTION OF PRODUCE.	PRODUCE REMOVED OR UTILISED.										REMARKS.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
		RESERVED FORESTS.										
Darjeeling Sub-division (Darjeeling Division)	Maling bamboos ... ... No.	.....	.....	2,670	13	.....	.....	.....	.....	2,670	13	
	One month mat-makers' ... }	.....	.....	163,800	288	.....	.....	.....	.....	163,800	288	Estimated 600 bamboos per permit.
	Permits for ditto 273 ... } ,,											IIc. Rs. 301.
	Fodder—											
	One month permits 1,766 ... Mds.	.....	.....	52,980	883	.....	.....	.....	.....	52,980	883	
	Coolie-loads ... 13,479 ... ,,	.....	.....	13,479	211	.....	.....	.....	.....	13,479	211	
	Grazing—											
	One month permits for cows ... No.	.....	.....	3,066	1,543	.....	.....	.....	.....	3,066	1,543	
	Ditto ditto bullocks ,,	.....	.....	506	254	.....	.....	.....	.....	506	254	
	Three ditto cows ,,	.....	.....	231	136	.....	.....	.....	.....	231	136	
	Ditto ditto buffaloes ,,	.....	.....	55	46	.....	.....	.....	.....	55	46	
	Ditto ditto sheep ,,	.....	.....	774	97	.....	.....	.....	.....	774	97	IId. Rs. 3,178.
	Canes, 30 coolie-loads ... ... Mds.	.....	.....	39	13	.....	.....	.....	.....	39	13	
	Do. 9 permits ... ... ,,	.....	.....	135	54	.....	.....	.....	.....	135	54	Estimate 1 permit=15 maunds.
	Aconite roots, estimated 100 ... ,,	.....	.....	100	30	.....	.....	.....	.....	100	30	Exclusive right for the season sold on tender.
	Seedlings No. 4,118 ... ... No.	.....	.....	.....	104	.....	.....	.....	.....	.....	104	
	Bramble sticks, No. 1800 ... ... ,,	.....	.....	60	5	.....	.....	.....	.....	60	5	
	Oak bark from fallen trees ... ,,	.....	.....	5	1	.....	.....	.....	.....	5	1	
	Moss ... ... ,,	.....	.....	3	.....	.....	.....	.....	.....	3	.....	IIc. Rs. 206.
	Bamboos ... ... ,,	.....	.....	74,301	702	.....	.....	.....	.....	74,301	702	IIc. Rs. 702.
Teesta Sub-division (Darjeeling Division)	Fodder—											
	One month permits 595 ... ... Mds.	.....	.....	17,850	149	.....	.....	.....	.....	18,135	153	
	Coolie-loads 285 ... ... ,,	.....	.....	285	4	.....	.....	.....	.....			
	Grazing—											
	One month permits for cows ... No.	.....	.....	1,197	150	.....	.....	.....	.....	1,197	150	
	Ditto ditto buffaloes ,,	.....	.....	258	93	.....	.....	.....	.....	258	93	
	Ditto ditto goats ,,	.....	.....	141	9	.....	.....	.....	.....	141	9	
	Ditto ditto ponies ,,	.....	.....	17	2	.....	.....	.....	.....	17	2	
	Three ditto cows ,,	.....	.....	2,163	287	.....	.....	.....	.....	2,163	287	
	Ditto ditto buffaloes ,,	.....	.....	291	73	.....	.....	.....	.....	291	73	
	Ditto ditto ponies ,,	.....	.....	2	.....	.....	.....	.....	.....	2	.....	
	Ditto ditto goats ,,	.....	.....	38	2	.....	.....	.....	.....	38	2	
	Ditto ditto sheep ,,	.....	.....	60	4	.....	.....	.....	.....	60	4	
	Twelve ditto cows ,,	.....	.....	.....	.....	646	969	.....	.....	646	969	
	Ditto ditto buffaloes ,,	.....	.....	.....	.....	127	571	.....	.....	127	571	
	Ditto ditto ponies ,,	.....	.....	.....	.....	16	24	.....	.....	16	24	
	Ditto ditto goats ,,	.....	.....	.....	.....	1	2	.....	.....	1	2	
	Ditto ditto bullocks ,,	.....	.....	.....	.....	12	18	.....	.....	12	18	IId. Rs. 773. Free grants Rs. 1,644.
	Thatch grass ... ... Mds.	.....	.....	4,402	66	.....	.....	.....	.....	4,402	66	
	Canes ... ... ,,	.....	.....	11	33	.....	.....	.....	.....	11	33	
	Hardi roots ... ... ,,	.....	.....	67	4	.....	.....	.....	.....	67	4	
	Manjit creeper ... ... ,,	.....	.....	2	1	.....	.....	.....	.....	2	1	
	Red soil ... ... ,,	.....	.....	112	1	.....	.....	.....	.....	112	1	
	Lime ... ... ,,	.....	.....	100	25	.....	.....	.....	.....	100	25	
	Borla and palm leaves ... ... ,,	.....	.....	632	18	.....	.....	.....	.....	632	18	IIc. Rs. 146.
	Bamboos ... ... No.	.....	.....	33,010	1,240	.....	.....	.....	.....	33,010	1,240	IIc. Rs. 1,240.
Kurseong Sub-division (Darjeeling Division).	Fodder—											
	Coolie-loads ... ... Mds.	.....	.....	24,860	389	.....	.....	.....	.....	24,860	389	
	One month permits for elephants 8. ,,	.....	.....	1,440	24	.....	.....	.....	.....	1,440	24	
	Grazing—											
	One month permits for cows... No.	.....	.....	807	139	.....	.....	.....	.....	807	139	
	Ditto ditto bullocks ,,	.....	.....	292	55	.....	.....	.....	.....	292	55	
	Ditto ditto ponies ,,	.....	.....	13	2	.....	.....	.....	.....	13	2	IId. Rs. 609.
	Thatch grass ... ... Mds.	.....	.....	10,597	321	.....	.....	.....	.....	10,597	321	
	Broom do. ... ... ,,	.....	.....	8	3	.....	.....	.....	.....	8	3	
	Cane ... ... ,,	.....	.....	74	127	.....	.....	.....	.....	74	127	
	Borla leaves ... ... ,,	.....	.....	240	2	.....	.....	.....	.....	240	2	
	Udal fibre ... ... ,,	.....	.....	1	.....	.....	.....	.....	.....	1	.....	
	Seedlings (58) ... ... ,,	.....	.....	.....	2	.....	.....	.....	.....	.....	2	IIc. Rs. 456.
	Bamboos ... ... No.	.....	.....	400	4	.....	.....	.....	.....	400	4	IIc. Rs. 4.
Julpigori Division.	Grazing—											
	One month permits for buffaloes No.	.....	.....	956	239	.....	.....	.....	.....	956	239	
	Ditto ditto cows ... ,,	.....	.....	117	15	.....	.....	.....	.....	117	15	IId. Rs. 254.
	Thatch grass ... ... Mds	.....	.....	10,067	105	.....	.....	.....	.....	10,067	105	
	Khur do. ... ... ,,	.....	.....	22	1	.....	.....	.....	.....	22	1	
	Long pepper ... ... ,,	.....	.....	12	3	.....	.....	.....	.....	12	3	
	Goicha leaves ... ... ,,	.....	.....	690	46	.....	.....	.....	.....	690	46	IIc. Rs. 155.

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Out-turn of Minor Forest Produce during the year 1886-87—(continued.)

DIVISION.	DESCRIPTION OF PRODUCE.	PRODUCE REMOVED OR UTILISED.										REMARKS.
		By Government agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
Ranchi Division	Bamboos ... ... No.	.....	.....	2,906	29	.....	.....	.....	.....	2,906	29	IIe, Rs. 29.
	Fodder ... ... Mds.	.....	.....	853	15	.....	.....	.....	.....	853	15	
	Grazing—											
	One month permits for cows ... No.	.....	.....	27	2	.....	.....	.....	.....	27	2	
	Ditto ditto bullocks ,,	.....	.....	773	73	.....	.....	.....	.....	773	73	
	Ditto ditto buffaloes ,,	.....	.....	1,894	190	.....	.....	.....	.....	1,894	190	
	Ditto ditto goats ... ,,	.....	.....	133	3	.....	.....	.....	.....	133	3	
	One-day permits for elephants ,,	.....	.....	1,290	81	.....	.....	.....	.....	1,290	81	IId, Rs. 378.
	Khagra grass ... ... Mds.	.....	.....	4,684	76	120	1	.....	.....	4,784	77	
	Goicha leaves ... ... ,,	.....	.....	44	1	.....	.....	.....	.....	44	1	
	Canes ... ... ,,	.....	.....	.....	.....	10	2	.....	.....	10	2	
	Lime ... ... ,,	.....	.....	72	18	.....	.....	.....	.....	72	18	IIe. Rs. 95. Free grant Rs. 3. Ie, Rs. 3,451, IIe, Rs. 476.
Palamow Sub-division (Chota Nagpore Division).	Bamboos ... ... No.	616,379	*5,438	187,802	476	.....	.....	.....	.....	774,081	5,914	* Approximate value. 408,072 were sold for Rs. 3,462.
	Grazing—											
	One-month permits for buffaloes ,,	.....	.....	6,274	314	.....	.....	.....	.....	6,274	314	
	Ditto ditto for cows ... ,,	.....	.....	1,341	38	.....	.....	.....	.....	1,341	38	
	Ditto ditto for bullocks ,,	.....	.....	33	1	.....	.....	.....	.....	33	1	
	Ditto ditto for bulls ... ,,	.....	.....	33	1	.....	.....	.....	.....	33	1	
	Ditto ditto for ponies ... ,,	.....	.....	5	.....	.....	.....	.....	.....	5	.....	
	One-day permits for bullocks ... ,,	.....	.....	55	1	.....	.....	.....	.....	55	1	IId, Rs. 305.
	Palas lac ... ... Mds.	3	8	.....	.....	.....	.....	.....	.....	3	8	Ie, Rs. 8.
	Ditto ... ... ,,	.....	.....	1	1	.....	.....	.....	.....	1	1	
	Khur grass ... ... ,,	.....	.....	1,348	21	.....	.....	.....	.....	1,348	21	
	Sabai do. ... ... ,,	.....	.....	336	10	.....	.....	.....	.....	336	10	
	Suk do. ... ... ,,	.....	.....	32	1	.....	.....	.....	.....	32	1	
	Mahua flowers ... ... ,,	.....	.....	30	7	.....	.....	.....	.....	30	7	
	Rent of trees for laying lac. { Mahua 218 ... Mds.	.....	.....	183	55	.....	.....	.....	.....	183	55	
	Mangoe 2 ... ,,	.....	.....	3	1	.....	.....	.....	.....	3	1	
	Kusum 44 ... ,,	.....	.....	73	22	.....	.....	.....	.....	73	22	IIe, Rs. 116.
Hazaribagh Sub-division (Chota Nagpore Division).	Bamboos ... ... No.	.....	.....	22,394	112	.....	.....	.....	.....	22,394	112	IIe, Rs. 112.
	Thatch grass ... ... Mds.	.....	.....	3,090	55	.....	.....	.....	.....	3,090	55	
	Sabai do. ... ... ,,	.....	.....	1,000	120	.....	.....	.....	.....	1,000	120	
	Fencing thorns ... ... ,,	.....	.....	90	1	.....	.....	.....	.....	90	1	
	Mahua flowers ... ... ,,	.....	.....	700	60	.....	.....	.....	.....	700	60	
	Jack fruits ... ... ,,	.....	.....	30	5	.....	.....	.....	.....	30	5	IIe, Rs. 241.
	Kanyar leaves ... ... ,,	.....	.....	2	.....	.....	.....	.....	.....	2	.....	
	Rent of 70 mica mines ... } ,, Estimated yield in maunds ... }	.....	.....	2,000	235	.....	.....	.....	.....	2,000	235	Revenue credited to Head V.
Singbhoom Sub-division (Chota Nagpore Division).	Bamboos ... ... No.	140	*	32,035	23	500	3	.....	.....	32,675	26	IIe, Rs. 23. Free grants Rs. 3. * III, six annas.
	Fodder ... ... Mds.	.....	.....	40	1	.....	.....	.....	.....	40	1	
	Grazing—											
	One-month permits for buffaloes No.	.....	.....	7,963	249	70	7	.....	.....	8,033	256	
	Ditto ditto for cows ... ,,	.....	.....	114	2	160	7	.....	.....	274	9	IId, Rs. 252. Free grants, Rs. 14.
	Lac ... ... Mds.	1/0	2	.....	.....	.....	.....	.....	.....	1/0	2	Ie, Rs. 2.
	Lac ... ... ,,	.....	.....	231	9	.....	.....	.....	.....	231	9	
	Sabai grass ... ... ,,	8	2	326	88	.....	.....	.....	.....	334	90	
	Thatch do. ... ... ,,	.....	.....	3,019	31	5,010	9	.....	.....	8,019	40	
	Chopa fibre ... ... ,,	.....	.....	13	1	.....	.....	.....	.....	13	1	
	Slate stone ... ... ,,	.....	.....	83	1	.....	.....	.....	.....	83	1	
	Brushwood, &c. ... ... ,,	.....	.....	102	1	.....	.....	.....	.....	102	1	
	Sal, khejur, &c., leaves ... ... ,,	.....	.....	54	1	.....	.....	.....	.....	54	1	
	Silk cocoons (19,870) ... ... ,,	.....	3	24	107	.....	.....	.....	.....	24	110	Ie, Rs. 2. IIe, ,, 239. III ,, 3. Free grants, Rs. 9.
Sunderbunds Division.	Gelpatta ... ... Mds.	.....	.....	3,702,016	57,844	.....	.....	.....	.....	3,702,016	57,844	
	Nuli ... ... ,,	.....	.....	169,216	2,644	.....	.....	.....	.....	169,216	2,644	
	Shells ... ... ,,	.....	.....	94,336	1,474	.....	.....	.....	.....	94,336	1,474	
	Hental ... ... ,,	.....	.....	704	11	.....	.....	.....	.....	704	11	
	Cane ... ... ,,	.....	.....	3,584	56	.....	.....	.....	.....	3,584	56	
	Creepers ... ... ,,	.....	.....	64	1	.....	.....	.....	.....	64	1	
	Malia grass ... ... ,,	.....	.....	192	3	.....	.....	.....	.....	192	3	
	Wax and honey ... ... ,,	.....	.....	2,378	1,189	.....	.....	.....	.....	2,378	1,189	
	Add—Fractions of a rupee ...	.....	.....	.....	1	.....	.....	.....	.....	.....	1	IIe, Rs. 63,223.

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Out-turn of Minor Forest Produce during the year 1886-87—(continued)

Division.	Description of Produce.	Produce removed or utilized. By Government Agency. Quantity.	By Government Agency. Value.	By Purchasers. Quantity.	By Purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By Right-holders. Quantity.	By Right-holders. Value.	Total. Quantity.	Total. Value.	Remarks.
			Rs.		Rs.		Rs.		Rs.		Rs.	
Chittagong Division.	Orah bamboos ... ... No.	.....	.....	342	2	.....	.....	.....	.....	342	2	
	Mitenga do. ... ... ,,	.....	.....	3,222	13	.....	.....	.....	.....	3,222	13	
	Dolu do. ... ... ,,	.....	.....	27,733	111	.....	.....	.....	.....	27,733	111	
	Mull do. ... ... ,,	.....	.....	4,108,100	10,271	.....	.....	.....	.....	4,108,100	10,271	
	Kallai flurry do. ... ... ,,	.....	.....	3,930	10	.....	.....	.....	.....	3,930	10	IIc, Rs. 10,407.
	Canes estimated ... ... Mds.	.....	.....	4,697	1,568	.....	.....	.....	.....	4,697	1,568	
	Sun grass ... ... ,,	.....	.....	1,500	228	.....	.....	.....	.....	1,500	228	
	Kurtuh pat (leaves) ... ... ,,	.....	.....	367	30	.....	.....	.....	.....	367	30	
	Chaulmugra fruits ... ... ,,	.....	.....	20	20	.....	.....	.....	.....	20	20	IIe, Rs. 1,860.
Orissa Division.	Bamboos ... ... No.	105,966	1,166*	635,787	1,649	.....	.....	.....	.....	741,703	2,817	Ic, Rs. 1,053, proceed of 95,330 bamboos.
	Grazing—											* Approximate value.
	One-month permits for buffaloes. ,,	.....	.....	6,384	598	.....	.....	.....	.....	6,384	598	IIc, Rs. 1,649.
	One-month permits for buffalo calves. ,,	.....	.....	1,198	56	.....	.....	.....	.....	1,198	56	
	One-month permits for cows ,,	.....	.....	133	6	.....	.....	.....	.....	133	6	
	Ditto ditto for cow calves. ,,	.....	.....	2	.....	.....	.....	.....	.....	2	.....	
	One month permits for bullocks ,,	.....	.....	1,035	65	.....	.....	.....	.....	1,035	65	
	Six-month ditto for buffaloes ,,	.....	.....	21	11	.....	.....	.....	.....	21	11	
	Ditto ditto for cows ... ,,	.....	.....	4	1	.....	.....	.....	.....	4	1	IId (part), Rs. 739.
	Kendu fruits ... ... Mds.	.....	.....	32	2	.....	.....	.....	.....	32	2	
	Honey ... ... ,,	.....	.....	1	5	.....	.....	.....	.....	1	5	
	Sisli Nai ... ... ,,	.....	.....	942	15	.....	.....	.....	.....	942	15	
	Grass ... ... ,,	.....	.....	8,282	156	.....	.....	.....	.....	8,282	156	
	Iron ... ... ,,	.....	.....	53	27	.....	.....	.....	.....	53	27	
	Mahul ... ... ,,	.....	.....	47	3	.....	.....	.....	.....	47	3	
	Jhuna resin ... ... ,,	.....	.....	2	1	.....	.....	.....	.....	2	1	IIe, Rs. 209.

PROTECTED FORESTS.

Sunderbuns Division.	Golpatta ... ... Mds.	.....	.....	58,560	915	.....	.....	.....	.....	58,560	915	
	Nuli ... ... ,,	.....	.....	1,344	21	.....	.....	.....	.....	1,344	21	
	Shells ... ... ,,	.....	.....	58,496	914	.....	.....	.....	.....	58,496	914	
	Hental ... ... ,,	.....	.....	165,312	2,583	.....	.....	.....	.....	165,312	2,583	
	Cane ... ... ,,	.....	.....	448	7	.....	.....	.....	.....	448	7	
	Bhara bark ... ... ,,	.....	.....	576	9	.....	.....	.....	.....	576	9	
	Wax and honey ... ... ,,	.....	.....	3,550	1,775	.....	.....	.....	.....	3,550	1,775	IIe, Rs. 6,224.
	Add—Revenue under IIe.—Reserved Forests.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rs. 63,223.
	Total revenue of the Division under IIe.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 69,447.
Orissa Division.	Bamboos ... ... No.	.....	.....	553,840	1,295	6,480	20	.....	.....	562,320	1,315	Free grants, Rs. 20, IIc, Rs. 1,295.
	Add—Revenue under IIe.—Reserved Forests.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rs. 1,649.
	Total revenue of the Division under IIe.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 2,944.
	Grazing—											
	One month permits for goats ... No.	.....	.....	.....	.....	63,456*	5,949*	.....	.....	63,456	5,949	* The figures in the sub-columns under "By free grants" are he number of cattle grazed by the Khorda ryots on their annual house license four-anna permits, the unit being one animal grazed one month, one-twelfth of which is the number grazed daily throughout the year. The value is calculated at one-half the existing sanctioned grazingrates charged to outsiders.
	Ditto ditto for sheep ... ,,	.....	.....	.....	.....	21,864*	683*	.....	.....	21,864	683	
	Ditto ditto for buffaloes ,,	.....	.....	81	15	69,276*	6,495*	.....	.....	69,357	6,510	
	Ditto ditto for bulls ... ,,	.....	.....	.....	.....	6,696*	418*	.....	.....	6,696	418	
	Ditto ditto for bullocks ,,	.....	.....	.....	.....	704,316*	44,020*	.....	.....	704,316	44,020	
	Ditto ditto for cows ... ,,	.....	.....	3,309	90	699,360*	43,710*	.....	.....	701,669	43,800	
	Ditto ditto for calves ... ,,	.....	.....	113	3	.....	.....	.....	.....	113	3	
	Ditto ditto for horses and ponies. ,,	.....	.....	.....	.....	2,592*	162*	.....	.....	2,592	162	
	Kamila-gundi powder ... ... Mds.	.....	.....	160	160	.....	.....	.....	.....	160	160	
	Canes ... ... ,,	.....	.....	732	183	.....	.....	.....	.....	732	183	
	Laterite 378,850 c.ft. ... estimated ,,	.....	.....	542,475	1,899	25,800	80	.....	.....	568,275	1,895	
	Red clay, 300 ,, ... ,,	.....	.....	450	3	.....	.....	.....	.....	450	3	
	White clay 2,425 ,, ... ,,	.....	.....	3,637	24	.....	.....	.....	.....	3,637	24	
	Lime shooting, 2,800 c. ft. ... ,,	.....	.....	2,400	16	1,500	10	.....	.....	3,900	26	
	Brual wood ... ... ,,	.....	.....	680	21	.....	.....	.....	.....	680	21	
	Thorns ... ... ,,	.....	.....	820	13	.....	.....	.....	.....	820	13	
	Leaves and creepers ... ... ,,	.....	.....	64	1	.....	.....	.....	.....	64	1	
	Grass ... ... ,,	.....	.....	104	6	.....	.....	.....	.....	104	6	IId (part), Rs. 103. Free grants, Rs. 1,01,637.
	Stakes ... ... ,,	.....	.....	76	3	.....	.....	.....	.....	76	3	Ie, Rs. 238.
	Fruits ... ... ,,	.....	.....	5,792	724	.....	.....	.....	.....	5,792	724	Free grants, Rs. 96.
	Two elephant tusks ... ... ,,	1	238	.....	.....	.....	.....	.....	.....	1	238	IIe, Rs. 2,903.
	Add—Revenue under IIe.—Reserved Forests.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rs. 209.
	Total revenue of the Division under IIe.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 3,112.

ANNUAL FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Out-turn of Minor Forest Produce during the year 1886-87—(continued.)

DIVISION.	DESCRIPTION OF PRODUCE.	PRODUCE REMOVED OR UTILISED.										REMARKS.
		By Government Agency.		By purchasers.		By free grants.		By right-holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
			Rs.		Rs.		Rs.		Rs.		Rs.	
					UNCLASSED STATE FORESTS AND WASTE LANDS.							
Chittagong Division.	Mitenga bamboos ... ... No.	.....	.....	75,571	227	.....	.....	.....	.....	75,571	227	* Approximate value; 330 sold for Rs. 1-13-0, Head III.
	Orah do. ... ... ,,	.....	.....	1,650	5	.....	.....	.....	.....	1,650	5	
	Kalai do. ... ... ,,	.....	.....	910	2	.....	.....	.....	.....	910	2	
	Dalu do. ... ... ,,	.....	.....	807,432	2,422	.....	.....	.....	.....	807,432	2,422	
	Muli do. ... ... ,,	1,940	11*	10,533,886	31,612	.....	.....	.....	.....	10,535,826	31,623	
	Permit fees on bamboos	.....	.....	.....	2,557	.....	.....	.....	.....	.....	2,557	IIc ... Rs. 36,835
	Deduct—											
	Amount paid to Maharajah, Hill Tipperah.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 7,746
	IIc—Unclassed State forests and waste lands nett.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 29,079
	Add—											
	Revenue under IIc—Reserved forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 10,407
	Total revenue of the Division under IIc.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 39,486
	Canes ... ... Mds.	.....	.....	8,215	2,183	.....	.....	.....	.....	8,215	2,183	
	Sun grass ... ... ,,	.....	.....	163,894	7,859	.....	.....	.....	.....	163,894	7,859	
	Kuruchpat leaves ... ... ,,	.....	.....	5,991	390	.....	.....	.....	.....	5,991	390	
	Gurjun oil ... ... ,,	.....	.....	60	60	.....	.....	.....	.....	60	60	
	Permit fees on canes and Kuruchpat...	.....	.....	.....	169	.....	.....	.....	.....	.....	169	IIc ,, 29,661
	Deduct—											
	Amount paid to the Maharajah, Hill Tipperah.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 2,065
	IIc—Unclassed State forests and waste lands nett.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 7,096
	Add—											
	Revenue under IIc—Reserved forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 1,866
	Total revenue of the Division under IIc.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	,, 9,562
					ABSTRACT FOR THE CIRCLE.							
	BAMBOOS:—											
	Reserved forests ... ... No.	722,384	6,606	5,267,381	14,043	500	3	.....	.....	5,990,265	21,553	Revenue IIc, Rs. 14,943
	Protected forests ... ... ,,	.....	.....	553,840	1,295	8,480	20	.....	.....	562,320	1,315	Ditto ,, 1,295
	Unclassed state forests and waste lands. ,,	1,940	11	11,419,439	36,825	....	.....	.....	.....	11,421,379	36,836	Gross ,, 36,825
												Less amount paid to Maharajah, Hill Tipperah Rs. 7,746
	GRAND TOTAL, BAMBOOS ... No.	724,324	6,617	17,240,660	53,063	8,980	23	.....	.....	17,973,964	59,703	Net Rs. 29,079
												Total revenue credited under IIc, Rs. 45,317.
	GRAZING AND FODDER GRASS:—				RESERVED FORESTS.							
	For the purposes of the following abstract, permits for grazing for periods longer than one month have been expressed in their equivalents in one-month permits. The unit is therefore one animal grazed for one month, and the number here given, if divided by 12, will give the average number of animals grazing daily throughout the year.											
	Grazing:—											
	One-month permits for cows ... No.	.....	.....	13,304	2,321	7,012	976	.....	.....	21,306	3,297	
	Ditto ditto bulls ... ,,	.....	.....	38	1	.....	.....	.....	.....	38	1	
	Ditto ditto cow-calves ,,	.....	.....	2	.....	.....	.....	.....	.....	2	.....	
	Ditto ditto bullocks ,,	.....	.....	2,638	440	144	18	.....	.....	2,782	407	
	Ditto ditto buffaloes ,,	.....	.....	24,593	1,364	1,594	578	.....	.....	26,187	2,442	
	Ditto ditto ditto calves ,,	.....	.....	1,198	56	.....	.....	.....	.....	1,198	56	
	Ditto ditto ponies ... ,,	.....	.....	41	4	192	24	.....	.....	233	28	
	Ditto ditto sheep ... ,,	.....	.....	2,502	101	.....	.....	.....	.....	2,502	101	
	Ditto ditto goats ... ,,	.....	.....	388	19	12	2	.....	.....	400	21	
	Ditto ditto elephants ,,	.....	.....	43	81	.....	.....	.....	.....	43	81	
	Total grazing, Reserved Forests ,,	.....	.....	44,837	4,896	9,854	1,598	.....	.....	54,691	6,494	Grazing (part) Rs. 4,896
												Free grants ,, 1,598
					PROTECTED FORESTS.							
	Grazing—											
	One-month permits for cows ... No.	.....	.....	2,309	90	699,360	43,710	.....	.....	701,669	43,800	
	Ditto ditto bulls ,,	.....	.....	.....	.....	6,696	418	.....	.....	6,696	418	
	Ditto ditto cow-calves ,,	.....	.....	113	3	.....	.....	.....	.....	113	3	
	Ditto ditto bullocks ,,	.....	.....	.....	.....	704,316	44,020	.....	.....	704,316	44,020	
	Ditto ditto buffaloes ,,	.....	.....	81	15	69,276	6,495	.....	.....	69,357	6,510	
	Ditto ditto horses and ponies. ,,	.....	.....	.....	.....	2,592	162	.....	.....	2,592	162	
	Ditto ditto sheep ,,	.....	.....	.....	.....	21,804	683	.....	.....	21,804	683	
	Ditto ditto goats ,,	.....	.....	.....	.....	63,456	5,949	.....	.....	63,456	5,949	
	Total Grazing, Protected Forests ,,	.....	.....	2,503	108	1,567,360	1,01,437	.....	.....	1,570,063	1,01,545	Grazing (part) Rs. 108 Free grants 101,437
	GRAND TOTAL VALUE, GRAZING Rs.	.....	.....	.....	5,004	.....	1,03,035	.....	.....	.....	1,08,039	Grazing ,, 5,004 Free grants ,, 103,035

FORM No. 55.

FOREST DEPARTMENT, BENGAL.

Out-turn of Minor Forest Produce during the year 1886-87—(concluded.)

DIVISION.	DESCRIPTION OF PRODUCE.	PRODUCE REMOVED OR UTILISED. By Government Agency. Quantity.	By Government Agency. Value.	By purchasers. Quantity.	By purchasers. Value.	By free grants. Quantity.	By free grants. Value.	By right-holders. Quantity.	By right-holders. Value.	Total. Quantity.	Total. Value.	REMARKS.
		Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	
	OTHER MINOR PRODUCE:—			ABSTRACT OF THE CIRCLE—*(continued.)*								
				RESERVED FORESTS.								
	Fodder ... ... Mds.	.....	.....	111,617	1,676	.....	.....	.....	.....	111,617	1,676	Revenue credited under IId. Total revenue under IId, Rs. 3,080.
	Cane ... ... ,,	.....	.....	8,550	1,870	10	2	.....	.....	8,550	1,872	
	Thatch and other grasses ... ,,	.....	.....	47,320	1,072	5,130	10	.....	.....	52,450	1,082	
	Sabai grass ... ... ,,	8	2	1,662	218	.....	.....	.....	.....	1,670	220	
	Leaves (thatching and other) ... ,,	.....	.....	2,029	93	.....	.....	.....	.....	2,029	93	
	Null ... ... ,,	.....	.....	169,216	2,644	.....	.....	.....	.....	169,216	2,644	
	Golpatta ... ... ,,	.....	.....	3,702,016	57,844	.....	.....	.....	.....	3,702,016	57,844	
	Hental ... ... ,,	.....	.....	704	11	.....	.....	.....	.....	704	11	
	Shells for lime ... ... ,,	.....	.....	94,336	1,474	.....	.....	.....	.....	94,336	1,474	
	Bark, resin, fibres, roots and moss ... ... ,,	.....	.....	1,133	53	.....	.....	.....	.....	1,133	53	
	Thorns, creepers, stakes and brambles ... ... ,,	.....	.....	318	9	.....	.....	.....	.....	318	9	
	Lime ... ... ,,	.....	.....	172	43	.....	.....	.....	.....	172	43	
	Laterite, &c. ... ... ,,	.....	.....	83	1	.....	.....	.....	.....	83	1	
	Mica ... ... ,,	.....	.....	2,000	285	.....	.....	.....	.....	2,000	285	Revenue credited under V "Miscellaneous."
	Earth, clay &c. ... ... ,,	.....	.....	112	1	.....	.....	.....	.....	112	1	
	Lac ... ... ,,	3	10	491	88	.....	.....	.....	.....	494	98	
	Mahua flowers ... ... ,,	.....	.....	730	67	.....	.....	.....	.....	730	67	
	Wax and honey ... ... ,,	.....	.....	2,379	1,194	.....	.....	.....	.....	2,379	1,194	
	Fruits and seeds ... ... ,,	.....	.....	94	30	.....	.....	.....	.....	94	30	
	Iron ... ... ,,	.....	.....	53	27	.....	.....	.....	.....	53	27	
	Silk cocoons ... ... ,,	.....	3	24	107	.....	.....	.....	.....	24	110	
	Seedling, &c. (4,173)	.....	.....	.....	106	.....	.....	.....	.....	.....	106	
	Unclassed permit fees	.....	.....	.....	1	.....	.....	.....	.....	.....	1	IIe (part), Rs. 66,913
	Total Other Minor Produce, Reserved Forests. ,,	11	15	4,145,229	66,913	5,140	12	.....	.....	4,150,380	66,940	Less { Fodder ,, 1,676 / Mica ,, 285
												Total, IIe ,, 66,952
												Free grants ,, 12
				PROTECTED FORESTS.								
	Cane ... ... Mds.	.....	.....	1,180	190	.....	.....	.....	.....	1,180	190	
	Thatch and other grasses ... ,,	.....	.....	104	6	.....	.....	.....	.....	104	6	
	Leaves (thatching and others) ... ,,	.....	.....	64	1	.....	.....	.....	.....	64	1	
	Null ... ... ,,	.....	.....	1,344	21	.....	.....	.....	.....	1,344	21	
	Golpatta ... ... ,,	.....	.....	58,560	915	.....	.....	.....	.....	58,560	915	
	Hental ... ... ,,	.....	.....	165,312	2,583	.....	.....	.....	.....	165,312	2,583	
	Shells for lime ... ... ,,	.....	.....	58,496	914	.....	.....	.....	.....	58,496	914	
	Bark, resin, roots, fibres and moss. ,,	.....	.....	576	9	.....	.....	.....	.....	576	9	
	Thorns, creepers, stakes and brambles. ,,	.....	.....	1,576	37	.....	.....	.....	.....	1,576	37	
	Lime ... ... ,,	.....	.....	2,400	16	1,500	10	.....	.....	3,900	26	
	Laterite, &c. ... ... ,,	.....	.....	342,475	1,809	25,800	86	.....	.....	368,275	1,895	
	Earth, clay, &c. ... ... ,,	.....	.....	4,087	27	.....	.....	.....	.....	4,087	27	
	Kamila gundi powder ... ... ,,	.....	.....	160	109	.....	.....	.....	.....	160	109	
	Wax and honey ... ... ,,	.....	.....	3,550	1,775	.....	.....	.....	.....	3,550	1,775	
	Fruits and seeds ... ... ,,	.....	.....	5,792	724	.....	.....	.....	.....	5,792	724	
	Elephant tusks ... ... ,,	1	238	.....	.....	.....	.....	.....	.....	1	238	
	Total Other Minor Produce, Protected Forests. ,,	1	238	645,076	9,127	27,300	96	.....	.....	672,977	9,461	IIe (part), Rs. 9,127 Free grants ,, 96
				UNCLASSED STATE FORESTS AND WASTE LANDS.								
	Cane ... ... Mds.	.....	.....	8,215	2,183	.....	.....	.....	.....	8,215	2,183	
	Thatch and other grasses ... ,,	.....	.....	163,694	7,859	.....	.....	.....	.....	163,694	7,859	
	Leaves (thatching and other) ... ,,	.....	.....	5,991	390	.....	.....	.....	.....	5,991	390	
	Gurjon oil ... ... ,,	.....	.....	60	60	.....	.....	.....	.....	60	60	
	Unclassed permit fees	.....	.....	.....	169	.....	.....	.....	.....	.....	169	IIe (part), Rs. 10,661
	Total Other Minor Produce, Unclassed, &c., lands. ,,	.....	.....	177,960	10,661	.....	.....	.....	.....	177,960	10,661	Less amount paid Maharajah, Hill Tipperah... Rs. 2,965
												Balance ... ,, 7,696
	GRAND TOTAL OF THE CIRCLE, OTHER MINOR PRODUCE. ,,	12	253	5,168,865	86,701	32,440	108	.....	.....	5,201,317	86,962	Total revenue credited under IIe ... Rs. 83,775

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depôts or sold locally during the year 1886-87.

TIMBER.

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Balance at commencement of the year—				
Darjeeling Sub-division—				
Champ scantling	433	223		
Bük ,,	604	1,191		
Lál ,,	220	93		
			1,257	1,505
Teesta Sub-division—				
Sál logs	11	228		
Other ,,	3	52		
Sál sleepers	2,319	3,207		
Chilaunl ,,	441	588		
Scantling, various	1,528	2,187		
Poles	2	.....		
			4,304	6,212
Kurseong Sub-division—				
Sál logs	3	275		
Sáj ,,	145	5,519		
Tún ,,	15	355		
Other ,,	21	339		
Scantling, various	206	118		
Sissu poles	9	77		
			404	7,433
Julpigori Division—				
Sál logs	308	4,984		
,, sleepers	1,437	1,916		
			1,745	6,900
Buxa Division—				
Sál logs	757	24,908		
Various ,,	43	1,307		
Sál posts	193	.....		
,, sleepers	22,600	28,574		
Various scantlings	397	307		
,, pieces	21	.....		
Poles (kala khambas)	15	.....		
			24,027	55,486
Chittagong Division—				
Jarul logs	40	1,319		
Other ,,	7	383		
Various scantling	19	30		
Teak poles	368	1,104		
			434	2,835
Orissa Division—				
Sál logs	294	10,226		
Other ,,	8	101		
Other sál timber	65	800		
Slabs, &c.	56	72		
Miscellaneous	137	.....		
			555	11,199
Total balance	.....	.....	32,726	91,570
Received from the forest in the sale depôts—				
Teesta Sub-division—				
Sál sleepers	556	741		
Scantling	35	47		
			591	788
Julpigori Division—				
Sál logs	176	3,694		
Poles	30	.....		
			206	3,694
Buxa Division—				
Sleepers m. g.	14,517	19,321		
,, tramway	7,819	7,819		
Scantling	647	1,332		
Posts	193	.....		
Slabs	270	.....		
			23,446	28,492
Singbhoom Sub-division—				
Sleepers b. g.	2,908	2,850		
Scantling	530	899		
Slabs	40	30		
Beams	31	127		
Poles	610	2,102		
Beams	9	84		
			4,231	12,092
Chittagong Division—				
Boats, various	73	6,917		
Logs	180	8,496		
Posts	3	8		
Scantling	49	36		
			304	15,457
Orissa Division—				
Logs	251	8,198		
Sleepers b. g. passed	344	2,893		
,, b. g. rejected	279	971		
Scantling	22	19		
Rafts	284	.....		
			1,680	12,082
Total received from forests in sale depôts...	.....	.....	30,458	72,605
Received from the forests and sold locally—				
Julpigori Division—				
Sál logs	113	1,650		
			113	1,650

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Removed by purchasers from sale depôts—				
Darjeeling Sub-division—				
Champ scantling	55	49		
Bük ,,	213	556		
			268	605
Teesta Sub-division—				
Sál logs	11	228		
,, sleepers m. g.	1,732	2,309		
Chilaunl ,,	10	13		
Scantling	1,006	1,146		
Poles	2	.....		
			2,761	3,696
Kurseong Sub-division—				
Sál logs	2	79		
Sáj ,,	1	32		
			3	111
Julpigori Division—				
Sál logs	200	3,842		
,, sleepers m. g.	1,300	1,733		
Poles	5	85		
			1,505	5,660
Buxa Division—				
Sál logs	337	10,623		
Other ,,	43	1,807		
Sleepers m. g.	18,540	20,702		
,, tramway	10,575	10,575		
Scantling	2,059	2,836		
Slabs and pieces	1,200	.....		
Posts	131	.....		
Sál (kala khambas)	15	.....		
			29,915	46,134
Singbhoom Sub-division—				
Scantling	530	806		
Beams	31	176		
Poles	550	1,892		
			1,111	2,462
Sunderbuns Division—				
Sundri logs	37	338		
Pussur ,,	40	421		
Posts	11	4		
Boat	1	.....		
			98	763
Chittagong Division—				
Logs	154	6,996		
Scantling	3	7		
Boats	60	6,180		
Teak poles	358	1,074		
Slabs	30	107		
			605	14,323
Orissa Division—				
Sál logs	93	2,904		
,, sleepers b. g.	368	1,277		
Scantling	4	16		
Rafts	46	.....		
Slabs	1	2		
			502	4,199
Total removed by purchasers from sale depôts	.....	.....	26,768	77,922
Sold locally (as per contra)	.....	.....	4,777	5,934
Given up to owners—				
Sunderbuns Division—				
Sundri logs	40	340		
Amoor ,,	2	3		
Post	1	1		
			43	344
Chittagong Division—				
Boats	2	140	2	140
			45	483
Reduced on remeasurement—				
Kurseong Sub-division—				
Sál logs	.....	5	.....	5
Buxa Division—				
Sál logs	.....	673		
Sleepers m.g.	.....	53		
Scantling	.....	9		
			.....	735
Orissa Division—				
Sál logs	.....	222	.....	222
Total reduced on remeasurement	.....	.....	.....	962
Written off as lost and used by department—				
Darjeeling Sub-division—				
Champ scantling	60	40		
Bük	7	7		
			67	47
Teesta Sub-division—				
Scantling	104	112	104	112
Kurseong Sub-division—				
Tún log	1	45		
Sáj	8	301		
			9	346
Julpigori Division—				
Sál logs	2	65		
Poles	30	.....		
Sleepers m. g.	64	85		
			96	150

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depôts, or sold locally during the year 1886-87—(continued.)

TIMBER—*continued.*

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Received from the forests and sold locally—*concluded.*				
Buxa Division—				
Sál logs	31	406		
Misc. ,,	93	1,458		
Sleepers m. g.	260	361		
,, tramway	288	288		
Scantling	91	165		
Posts	105	960		
Slabs and pieces	3,302	53		
Misc. and chilaunt pieces	85	.....		
			4,263	3,803
Singbhoom Sub-division—				
Beams	10	187		
Slabs	388	291		
Poles	3	3		
			401	481
Total sold locally	.....	.....	4,777	5,934
Found in depôts—				
Buxa Division—				
Sál logs	1	28		
Sleepers tramway	10	10		
			11	38
Recovered from river-beds—				
Teesta Sub-division—				
Poles	56	.....		
			56	.....
Julpigori Division—				
Sál logs	19	973		
			19	973
Total recovered from river-beds	.....	.....	75	973
Received by confiscation in depôts—				
Buxa Division—				
Sál logs	1	30		
			1	30
Singbhoom Sub-division—				
Scantling	2	1		
			2	1
Sunderbuns Division—				
Sundri logs	213	1,776		
Pussur ,,	64	448		
Amoor ,,	7	8		
Posts, various	60	68		
Ora	1	20		
Boat	1	.....		
			352	2,320
Total confiscated in depôts	.....	.....	355	2,351
Recovered as drift in depôts—				
Sunderbuns Division—				
Teakwood	1	20		
Poles	24	53		
			25	73
Received by remeasurement—				
Teesta Subdivision—				
Scantling	.....	19		
Julpigori Division—			.....	19
Sál logs	.....	487		
Poles	.....	61		
			.....	548
Buxa Division—				
Sleepers m. g.	.....	75		
			.....	75
Orissa Division—				
Sál logs	.....	6		
			.....	6
Total received by remeasurement	.....	.....	.....	648
Recovered from old bridges, &c.—				
Buxa Division—				
Scantling	9	2		
Slabs	4	.....		
			13	2
Received by conversion in depôts—				
Buxa Division—				
Sleepers m. g.	9	12		
Scantling	1,450	1,569		
Slabs and pieces	1,304	.....		
			2,763	1,581
Chittagong Division—				
Jarul logs	2	48		
Scantling	2	1		
Slabs and pieces	41	131		
			45	180
Orissa Division—				
Sál logs	2	41		
Scantling	4	16		
Slabs and pieces	6	5		
			12	62
Total conversion in depôts	.....	.....	2,820	1,823

PARTICULARS.	No. or quantity.	Cubic feet.	TOTAL OF EACH HEAD. No. or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Written off as lost and used by department—*concluded.*				
Buxa Division—				
Sál logs	10	617		
,, sleepers m. g.	144	188		
,, ,, tramway	116	110		
Scantling	147	173		
Slabs	270	.....		
Posts	16	.....		
			703	794
Singbhoom Sub-division—				
Scantling	11	4		
Slabs	10	7		
			21	11
Sunderbuns Division—				
Sundri logs	7	55		
Posts	26	26		
			33	81
Chittagong Division—				
Logs various	7	310		
Scantling	32	23		
Boat	1	37		
Teak poles	10	30		
			50	400
Orissa Division—				
Slabs	14	31		
Rafts	11	.....		
			25	31
Total lost and used by department	.....	.....	1,108	1,952
Converted in depôts—				
Buxa Division—				
Sál logs	149	4,462		
,, pieces	3	.....		
			152	4,462
Chittagong Division—				
Jarul log	1	46		
			1	46
Orissa Division—				
Sál logs	2	54		
			2	54
Total converted in depôts	.....	.....	155	4,574
Transferred to other sale depôts—(As per *contra*)	.....	.....	43,488	69,625
Transferred to other heads—				
Kurseong subdivision—				
Scantling, various	142	59		
			142	59
Julpigori Division—				
Sál logs to poles	24	302		
Ditto to fuel	55	852		
			79	1,224
Chittagong Division—				
Chikrassi log	1	97		
			1	97
Total transferred to other heads	.....	.....	222	1,380
Balance at the close of the year—				
Darjeeling Subdivision—				
Scantling Champ	318	133		
,, Buk	384	628		
,, Lall	220	92		
			922	853
Teesta subdivision—				
Sál logs	3	82		
Sál sleepers m. g.	1,143	1,630		
Chilauni ,, ,,	481	875		
Scantling (various)	453	946		
Poles	56	.....		
			2,086	3,211
Kurseong sub-division—				
Sál logs	6	196		
Sáj ,,	136	5,181		
Tún ,,	14	510		
Other ,,	21	889		
Scantling, various	64	59		
Posts	142	59		
Poles	9	77		
			392	6,971
Julpigori Division—				
Sál logs	213	4,960		
,, sleepers m. g.	73	98		
Poles	28	445		
			314	5,503
Buxa Division—				
Sál logs	203	8,891		
,, sleepers (various)	18,871	24,476		
Scantling ,,	297	212		
Posts	239	.....		
Slabs and pieces	121	.....		
			19,491	33,579

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depôts or sold locally during the year 1886-87—(continued).

PARTICULARS.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.
TIMBER—*concluded.*				
Received by transfer from sale depôts—				
Kurseong Sub-division—				
Sál logs	11	330	11	330
Buxa Division—				
Sál logs	205	6,334		
Sleepers, m.g.	29,540	39,334		
Do., tramway	11,732	11,732		
Posts	83	.....	41,560	57,398
Singbhoom Sub-division—				
Scantling	356	262	356	262
Orissa Division—				
Sál logs	251	7,977		
Sleepers, b.g., passed	844	2,805		
Do., b.g., rejected	219	783		
Rafts	247	.....	1,561	11,635
Total transferred from other sale depôts	.....	.....	43,488	69,625
Received by transfer from other heads—				
Kurseong Sub-division—				
Posts	143	59	143	59
Julpigori Division—				
Poles	24	393	24	393
Chittagong Division—				
Jarul logs	1	97	1	97
Total received by transfer from other heads	.....	.....	167	548
TOTAL, TIMBER	.....	.....	114,915	246,190

PARTICULARS.	Number or quantity.	Cubic feet.	TOTAL OF EACH HEAD. Number or quantity.	TOTAL OF EACH HEAD. Cubic feet.
Balance at close of the year—*concluded.*				
Singbhoom Sub-division—				
Sál sleepers, b. g.	2,993	9,350		
,, beams	9	37		
Poles, various	60	210		
Slabs	39	23	3,101	9,620
Sunderbuns Division—				
Sundri logs	120	1,054		
Pussur ,,	15	27		
Amoor ,,	5	5		
Ora ,,	1	20		
Poles and posts (various)	52	90		
Teak-wood pieces	1	20	203	1,216
Chittagong Division—				
Jarul logs	38	1,217		
Chikrassi logs	1	26		
Chapalish ,,	1	92		
Tún ,,	1	54		
Miscellaneous ,,	26	1,500		
Scantling	35	37		
Boats (various)	9	601		
Slabs and ends	11	24		
Posts	3	6	125	3,561
Orissa Division—				
Sál logs	462	15,281		
,, crooks	65	800		
Other logs	3	101		
Sál sleepers, passed b.g.	476	1,018		
,, ,, rejected	279	971		
,, scantling	22	18		
Raft, pieces, syals, and dandas	347	.....		
Slabs, ends and pieces	47	44		
Saw-pit posts	17	.....	1,718	18,833
Total balance	.....	.....	25,352	83,348
TOTAL TIMBER	.....	.....	114,915	246,190

ABSTRACT OF THE CIRCLE.

Balance at commencement of the year	.....	.....	39,720	91,570
Received from the forests in sale depôts	30,458	72,603		
Ditto ditto and sold locally	4,777	5,934		
Found in depôts	11	38		
Recovered from river beds	75	973		
Received by confiscation in depôts	353	2,351		
Ditto as drift ditto	26	73		
Ditto by remeasurement ditto	.....	648		
Recovered from old bridges, &c.	13	2	35,714	82,624
Received by conversion in depôts	.....	.....	2,820	1,823
Ditto by transfer from sale depôts	.....	.....	43,488	69,625
Ditto ditto from other heads	.....	.....	167	548
GRAND TOTAL, TIMBER	.....	.....	114,915	246,190

Removed by purchasers from sale depôts	30,768	77,922		
Sold locally	4,777	5,934	41,545	83,856
Given up to owners	.....	.....	45	493
Reduced on remeasurement	.....	962		
Lost and used by department	1,108	1,952	1,108	2,914
Converted in depôts	.....	.....	155	4,574
Transferred to other sale depôts	.....	.....	43,488	69,625
Ditto to other heads	.....	.....	232	1,380
Balance at the close of the year	.....	.....	25,352	83,348
GRAND TOTAL, TIMBER	.....	.....	114,915	246,190

PARTICULARS.	Number or quantity.	Total of each head.	PARTICULARS.	Number or quantity.	Total of each head.
FUEL.					
	Mds.	Mds.		Mds.	Mds.
Balance at commencement of year—			Removed by purchasers from depôts—		
Darjeeling Sub-division—			Darjeeling Sub-division—		
Firewood	41,848		Firewood	73,998	
Charcoal	8,618	54,466	Charcoal	17,533	
Julpigori Division—			Julpigori Division—		
Firewood (342 pieces)	624	624	Firewood (710 pieces)	1,420	
Total balance	.....	55,090	Singbhoom Sub-division—		
			Firewood	6,673	
Received in sale depôts—			Charcoal	127	
Darjeeling Sub-division—			Chittagong Division—		
Firewood	73,133		Firewood	73	99,823
Charcoal	21,279		Received from the forests and sold locally—		
Julpigori Division—			Darjeeling Sub-division—		
Firewood (675 pieces)	1,350		Charcoal	1,310	
Singbhoom Sub-division—			Kurseong Sub-division—		
Firewood	7,565		Firewood	3,000	
Charcoal	153		Sunderbuns Division—		
Chittagong Division—			Firewood	58	
Firewood	98	103,578	Orissa Division—		
			Firewood	1,996	6,364

FORM No. 56.

FOREST DEPARTMENT, BENGAL.

Account of Timber and other Produce cut or collected by Government agency and brought to Sale Depôts or sold locally during the year 1886-87—(concluded).

PARTICULARS.	Number or quantity.	Total of each head.	PARTICULARS.	Number or quantity.	Total of each head.
FUEL—*concluded.*					
	Mds.	Mds.		Mds.	Mds.
Received from the forests and sold locally—			Transferred to other sale depôts—		
Darjeeling Sub-division—			Darjeeling Sub-division—		
Charcoal	1,310		Charcoal	1,467	
Kurseong Sub-division—					1,467
Firewood	3,000		Transferred to forest depôts—		
Sunderbuns Division—			Darjeeling Sub-division—		
Firewood	58		Firewood	2,788	
Orissa Division—					2,788
Firewood	1,996		Lost and used by Department—		
		6,364	Darjeeling Sub-division—		
			Firewood	19,535	
Received by confiscation—			Charcoal	7,251	
Singbhoom Sub-division—			Julpigori Division—		
Firewood	93		Firewood (1 piece)	2	
Charcoal	1		Singbhoom Sub-division—		
		94	Firewood	1	
					26,789
Received by transfer from sale depôts—			Balance at close of year—		
Darjeeling Sub-division—			Darjeeling Sub-division—		
Charcoal	1,467		Firewood	22,660	
		1,467	Charcoal	5,113	
					27,773
Received by transfer from other heads—			Julpigori Division—		
Julpigori Division—			Firewood (331 pieces)	662	
Firewood (55 pieces)	110				662
		110	Singbhoom Sub-division—		
			Firewood	985	
			Charcoal	27	
					1,012
			Chittagong Division—		
			Firewood	25	
					25
			Total balance ...	.....	29,473
GRAND TOTAL, FUEL ...	.....	166,703	GRAND TOTAL, FUEL ...	.....	166,703
BAMBOOS.					
	No.	No.		No.	No.
Balance at commencement of the year—			Removed by purchasers from depôts—		
Palamow Sub-division—			Palamow Sub-division—		
Bamboos	1,059		Bamboos	403,075	
Orissa Division—			Singbhoom Sub-division—		
Bamboos	34,600		Bamboos	140	
		35,659	Chittagong Division—		
			Bamboos	8,300	
Received from the forests in depôts—			Orissa Division—		
Palamow Sub-division—			Bamboos	94,900	
Bamboos	470,007				501,415
Chittagong Division—					
Bamboos	4,940		Sold locally—		
Orissa Division—			Orissa Division—		
Bamboos	105,545		Bamboos	420	
		580,492			420
Received from the forests and sold locally—			Written off—		
Orissa Division—			Orissa Division—		
Bamboos	420		Bamboos (opening balance not in sale depôts)	34,600	
		420			34,600
Received by confiscation—			Balance at close of the year—		
Singbhoom Sub-division—			Palamow Sub-division—		
Bamboos	140		Bamboos	67,991	
		140	Chittagong Division—		
			Bamboos	1,640	
			Orissa Division—		
			Bamboos	10,645	
					80,276
Total Bamboos ...	.....	616,711	Total Bamboos ...	.....	616,711
OTHER MINOR PRODUCE.					
	Mds.	Mds.		Mds.	Mds.
Balance at commencement of the year ...	.....	.....	Removed by purchasers from depôts—		
Received from the forests and sold locally—			Singbhoom Sub-division—		
Palamow Sub-division—			Sabai grass	8	
Lac (Palas)	3		Silk cocoons (56)	.....	
Singbhoom Sub-division—			Sold locally—		
Lac (14 seers)	.....	3	Palamow Sub-division—		
Received by confiscation—			Lac (Palas)	3	
Singbhoom Sub-division—			Singbhoom Sub-division—		
Sabai grass	8		Lac (14 seers)	.....	
					3
Silk cocoons (56)	.....	8	Balance at close of the year	.....	
					.....
Total Other Produce ...	.....	11	Total Other Produce ...	.....	11

FORM No. 57A.

FOREST DEPARTMENT, BENGAL.

Abstract showing the Value of Timber and other Produce at Sale Depôts for the year 1886-87.

DESCRIPTION OF TIMBER AND OTHER PRODUCE.	ON HAND AT COMMENCEMENT OF THE YEAR.			ON HAND AT CLOSE OF THE YEAR.			DIFFERENCE IN VALUE.		REMARKS.
	Number.	Cubic feet.	Value.	Number.	Cubic feet.	Value.	In favour of the year.	Against the year.	
TIMBER.			Rs.			Rs.	Rs.	Rs.	
Darjeeling Sub-division.									
Scantling, various	1,257	1,505	1,160	922	853	640	.....	520	
Teesta Sub-division.									
Logs	14	280	140	3	52	20			
Sleepers	2,760	3,795	3,795	1,574	2,214	787			
Scantling	1,528	2,137	3,208	453	946	946			
Poles	2	.....	2	55	.....	42			
Total ...	4,304	6,212	7,142	2,086	3,212	1,795	.....	5,347	
Kurseong Sub-division.									
Logs	189	7,238	3,619	177	6,776	1,694			
Scantling	206	118	59	206	118	39			
Poles	9	77	.....	9	77	.....			
Total ...	404	7,433	3,678	392	6,971	1,733	.....	1,945	
Julpigori Division.									
Logs	308	4,984	3,738	213	4,960	3,720			
Sleepers	1,437	1,916	2,395	78	98	55			
Poles	.....	.....	.....	28	445	84			
Total ...	1,745	6,900	6,133	314	5,503	3,859	.....	2,274	
Buxa Division.									
Logs	600	26,305	26,305	263	8,891	8,891			
Sleepers	22,600	28,874	22,600	18,571	24,476	18,571			
Scantling	397	397	397	536	212	212			
Poles and slabs	230	.....	14	121	.....	8			
Total ...	24,927	55,486	49,226	19,491	33,579	27,682	.....	21,544	
Singbhoom Sub-division.									
Sleepers	.....	.....	.....	2,993	9,350	8,979			
Scantling	.....	.....	.....	9	37	37			
Poles	.....	.....	.....	60	210	120			
Slabs	.....	.....	.....	39	23	10			
Total ...	.....	.....	.....	3,101	9,620	9,146	9,146	.....	
Sunderbuns Division.									
Logs	.....	.....	.....	150	1,106	1,106			
Poles and posts	.....	.....	.....	52	90	52			
Pieces	.....	.....	.....	1	20	20			
Total ...	.....	.....	.....	203	1,216	1,178	1,178	.....	
Chittagong Division.									
Logs	47	1,701	1,275	67	2,891	904			
Boats	.....	.....	.....	9	601	90			
Scantling	19	30	20	38	45	23			
Poles	368	1,104	184	.....	.....	.....			
Slabs and ends	.....	... ..	.....	11	24	4			
Total ...	434	2,835	1,479	125	3,561	1,081	.....	398	
Orissa Division.									
Logs	207	10,327	6,044	465	15,382	7,691			
Sal crooks	65	800	1,000	65	800	400			
Slabs, &c.	56	72	56	47	44	47			
Miscellaneous pieces	157	.....		364	.....				
Sal sleepers	.....	.....	.....	755	2,589	1,510			
,, scantling	.....	.....	.....	22	18	9			
Total ...	555	11,199	8,000	1,718	18,833	9,657	1,657	.....	
Total timber ...	32,726	91,570	76,818	28,352	83,348	56,771	.....	20,047	
FUEL.	Mds.	C.ft. wood.		Mds.	C.ft. wood.				
Darjeeling Sub-division.									
Firewood ... ... Mds.	45,848	80,234	11,684	22,660	39,655	5,665			
Charcoal ... ... ,,	8,618	60,326*	6,463	5,113	35,791	3,835			* Incorrectly shown in report for 1885-86.
Total ...	54,466	140,560*	18,147	27,773	75,446	9,500	.....	8,647	
Julpigori Division.									
Firewood	120	210	30	662	1,158	120	90	.....	
Singbhoom Sub-division.									
Firewood	.....	.....	.....	985	1,674	197			
Charcoal	.....	.....	.....	27	189	14			
Total ...	.....	.....	.....	1,012	1,863	211	211	.....	
Chittagong Division.									
Firewood	.....	.....	.....	25	44	4	4	.....	
Total Fuel ...	54,586	140,770*	18,177	29,472	78,511	9,835	.....	8,342	
BAMBOOS.	No.			No.					
Palamow Sub-division ...	1,089	.....	8	67,991	.....	408	400	.....	
Chittagong Division	.....	.....	.....	1,049	.....	16	16	.....	
Orissa Division	34,600	.....	1,038	10,045	.....	107	.....	931	
Total Bamboos ...	35,689	.....	1,046	80,276	.....	531	.....	515	
GRAND TOTAL VALUE ...	.....	....	96,041	.....	.....	67,137	.....	28,904	

FORM No. 57B.

FOREST DEPARTMENT, BENGAL.

Abstract showing the value of Live-stock, Stores, Tools and Plant for the year 1886-87.

DESCRIPTION.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		REMARKS.
	Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
Direction Division.		Rs.		Rs.	Rs.	Rs.	
Stores (mathematical) ...	18	420	18	420	...		
Furniture	46	337	47	332	...		
Tents	3	380	3	380	...		
Total ...	67	1,137	68	1,152	15	...	
Working Plans Division.							
Stores (miscellaneous) ...	...	.....	72	38	...		
Office boxes	...	.....	2	15	...		
Furniture	..	.....	3	56	...		
Total ...	...	.....	77	159	159	...	
Darjeeling Division.							
Furniture	4	46	8	61	...		
Iron safe	...	.....	1	38	...		
Total ...	4	46	9	99	53	...	
Darjeeling Sub-division.							
Bungalows (inspection) ...	3	3,420	3	3,480	...		
Range houses	5	1,170	6	1,800	...		
Other do.	20	230	22	230	..		
Cattle pound	1	200	1	180	...		
Fuel godowns	2	2,850	2	2,700	...		
Dumpy level	1	130	1	120	...		
Other stores (mathematical)	15	320	15	300	...		
Iron safes	7	350	7	300	...		
Furniture	93	500	93	450	...		
Tents	2	70	1	30	...		
Total ...	149	9,340*	151	9,510	270	...	* Incorrectly shown as Rs. 8,240 in report for 1885-86.
Teesta Sub-division.							
Bungalow (head-quarters)	1	2,880	1	2,700	...		
Ditto (inspection) ...	5	2,375	4	2,000	...		
Range houses	7	700	6	1,000	...		
Other do.	17	340	13	300	...		
Stores (mathematical) ...	8	45	6	40	...		
Do. (miscellaneous) ...	244	250	100	200	...		
Iron safes	5	200	5	150	...		
Cash or office boxes ..	4	40	4	40	...		
Furniture	15	105	15	150	...		
Tent	...	.....	1	30	...		
Total ...	306	6,665	249	6,010	...	55	
Kurseong Sub-division.							
Bungalow (head-quarters)	1	4,000	1	3,850			
Ditto (inspection)	6	6,650	6	6,300			
Range houses	5	900	5	900			
Other do. at head-quarters	6	8,460	6	8,060			
Other houses in ranges ...	16	720	17	200			
Elephant shed	1	200	1	180			
Cattle pound	1	320	1	300			
Stores (mathematical) ...	4	220	4	170			
Iron safes	7	200	7	180			
Chubb's pad lock	...	.....	1	13			
Cash or office boxes ...	2	40	2	50			
Furniture	93	900	93	750			
Tents	2	... ...	2	.....			
Elephant	1	2,000	...	.....			
Total ...	145	24,010	146	20,853	...	3,157	
Julpigori Division.							
Bungalow (head-quarters)	1	900	1	900			
Range houses	4	180	4	120			
Other buildings at head-quarters	4	230	4	230			
Other buildings in ranges	17	160	17	80			
Stores (mathematical) ...	9	63	9	56			
Do. (miscellaneous) ...	120	360	120	240			
Iron safes	1	35	1	35			
Despatch boxes	1	5	1	5			
Furniture	35	180	35	140			
Tents	1	230	1	180			
Elephant	1	1,500	1	1,500			
Total ...	194	3,863	202	3,485	...	206	
Buxa Division.							
Bungalow (head-quarters)	1	4,700	1	4,700			
Ditto (inspection) ...	1	.....	2	700			
Range houses	7	330	7	500			
Other do.	37	340	37	340			
Stone godown	1	15	1	15			
Elephant shed	1	50	1	50			
Stores (mathematical) ...	19	100	23	100			
Do. (miscellaneous) ...	692	1,020	701	1,020			
Iron safes	6	181	9	210			
Despatch box	1	10	2	25			
Furniture	52	301	59	389			
Tents	1	35	1	30			
Elephants	6	13,100	6	13,200			
Elephant tusks	2	300	...	.....			
Total ...	817	20,537	847	21,364	767	...	

DESCRIPTION.	On hand at commencement of the year.		On hand at close of the year.		Difference in value.		REMARKS.
	Number.	Value.	Number.	Value.	In favor of the year.	Against the year.	
Chota Nagpore Division.		Rs.		Rs.	Rs.	Rs.	
Stores (mathematical) ...	30	300	65	376			
Do. (miscellaneous) ...	17	50	18	44			
Iron safe	1	150	1	150			
Furniture	80	330	49	304			
Tents	4	400	2	240			
Elephant	1	1,500	1	2,000			
Total ...	133	2,720	136	3,123	403	...	
Palamow Sub-division.							
Bungalow (head-quarters)	1	1,900	1	2,000			
Ditto (inspection) ...	6	1,300	6	1,200			
Range houses	5	50	5	350			
Stores (mathematical) ...	14	220	28	224			
Do. (miscellaneous) ...	43	135	46	154			
Iron safes	1	40	1	40			
Despath boxes	1	35	6	105			
Wooden office boxes ...	...	.....	6	51			
Furniture	35	128	33	217			
Tents	3	280	4	330			
Elephants	1	1,200	1	1,200			
Total ...	99	5,288	137	5,871	583	...	
Hazaribagh Sub-division.							
Range houses	1	400	1	400			In the absence of the sub-divisional return, this has been prepared in the Conservator's office, and the figures are approximate only.
Other ,, ...	4	302	4	300			
Stores (mathematical) ...	20	151	30	170			
Do. (miscellaneous) ...	34	71	48	90			
Iron safes	1	40	1	40			
Despatch boxes	1	40	1	40			
Furniture	10	129	33	160			
Total ...	80	1,133	127	1,200	67	...	
Singbhoom Sub-division.							
Bungalow (head-quarters)	1	3,500	1	3,500			
Range houses	9	1,767	9	1,767			
Other do. in ranges ...	17	360	19	450			
Stores (mathematical) ...	15	271	44	410			
Do. (miscellaneous) ...	1,100	4,106	1,238	4,711			
Iron safes	1	40	5	200			
Furniture	39	267	80	510			
Tents	2	85	3	145			
Elephants	1	2,000	3	6,000			
Total ...	1,185	12,396	1,402	17,693	5,297	...	
Sunderbuns Division.							
Revenue station houses ...	35	6,366	41	7,009			
Stores (mathematical) ...	28	533	100	384			
Do. (ordnance)	52	128	51	124			Exclusive value of ammunition, which is not known.
Do. (ship's)	680	338	2,643	550			
Do. (other)	521	1,687	1,000	1,359			
Iron safes	26	467	28	503			
Chubb's padlocks	26	199	24	182			
Furniture	209	842	242	1,017			
Steamer *Cygnet*	1	19,132	1	19,026			
Barge	1	5,500	1	5,000			
Jolly boats	2	642	3	1,076			
Steamer *Seal*	...	.....	1	32,782			
Station boats	51	7,118	51	5,357			
Total ...	2,002	42,752	4,185	74,405	31,743	...	
Chittagong Division.							
Bungalows (head-quarters)	1	2,000	1	2,000			
Ditto (inspection) ...	1	300	1	150			
Range houses	4	200	4	250			
Other buildings at head-quarters	5	750	9	1,020			
Other buildings in ranges	31	800	96	1,837			
Stores (mathematical) ...	25	300	14	335			
Do. (miscellaneous) ...	609	900	611	1,178			
Iron safes	5	100	5	100			
Furniture	70	600	66	685			
Boats	8	160	8	150			
Total ...	758	6,110	815	7,705	1,595	...	
Orissa Division.							
Range houses	7	1,235	7	1,200			In the absence of the Divisional return, this has been prepared in the Conservator's office, and the figures are not accurate.
Other buildings	12	700	12	700			
Stores (mathematical) ...	34	205	34	205			
Do. (miscellaneous) ...	248	1,036	257	1,120			
Buildings materials ...	...	61	2,388	80			
Iron safes	9	360	9	360			
Furniture	44	206	71	247			
Tents	1	95	1	95			
Elephants	5	8,200	8	4,200			
Buffaloes	24	400	24	400			
Elephant tusks	2	220	...	.....			
Total ...	386	12,718	2,807	8,007	...	4,711	
GRAND TOTAL ...	6,321	1,48,445*	11,358	1,81,866	33,421	...	* Incorrectly shown Rs. 1,000 less in report for 1884-85.
ABSTRACT.							
Total Value.							
Timber and other produce ...		96,041	...	67,137	...	28,904	
Live-stock, stores, tools and plant	...	1,48,445*	...	1,81,866	33,421	...	
GRAND TOTAL ...	...	2,44,486*	...	2,49,003	4,517	...	

DARJEELING,
The 15th July 1887.

A. L. HOME,
Conservator of Forests, Bengal.

ANNUAL FORM No. 58.

FOREST DEPARTMENT.

Summary of Revenue of the different Divisions during 1886-87.

BUDGET HEADS.	Direction.	Working plans Division.	Darjeeling Division.	Darjeeling Sub-division.	Teesta Sub-division.	Kurseong Sub-division.	Julpigori Division.	Buxa Division.	Chota Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhoom Sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	Total.
RECEIPTS.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A.P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Timber and other produce removed from the forests by Government agency:—																
a. Timber	.....	.....	.....	301 4 6	4,015 4 0	60 2 6	4,446 6 0	49,997 8 5	.....	.....	.....	532 4 0	.....	36 8 0	2,967 0 9	62,296 6 2
b. Firewood and charcoal ...	.....	.....	.....	39,127 3 9	.....	240 0 0	58 0 0	.....	.....	.....	.....	570 3 6	.....	.....	150 4 0	
c. Bamboos	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,462 2 0	.....	.....	.....	.....	1,052 8 1	
d. Sandal-wood ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	.....	.....	.....	.....
e. Grass and other minor produce	.....	.....	.....	.....	.....	.....	.....	.....	.....	7 9 6	.....	1 12 0	.....	.....	238 7 0	247 12 6
II.—Timber and other produce removed from the forests by consumers or purchasers:—																
a. Timber	.....	.....	.....	6,170 5 0	5,745 9 0	5,487 9 6	3,646 8 0	1,946 8 0	.....	.....	46 1 9	133 14 6	1,71,233 12 2	25,536 15 7	189 11 9	2,20,133 15 3
b. Firewood and charcoal ...	.....	.....	.....	11,733 6 0	3,189 1 6	3,251 3 6	1,351 0 3	116 0 0	.....	.....	50 0 0	55 14 0	1,23,812 4 3	386 12 3	14,900 8 6	1,58,824 2 3
c. Bamboos	.....	.....	.....	301 9 0	702 0 9	1,239 9 9	4 0 0	29 0 8	.....	475 8 9	111 15 9	23 0 3	.....	39,486 5 7	2,944 1 3	45,317 3 9
d. Grazing and fodder grass ...	.....	.....	.....	3,171 13 9	772 10 3	608 12 3	253 10 0	378 1 6	.....	395 6 9	.....	251 14 6	.....	.....	847 8 6	6,679 13 6
e. Other minor produce	.....	.....	.....	205 14 6	145 10 3	455 15 6	154 9 9	94 15 0	.....	118 2 0	240 10 0	238 11 3	69,446 10 3	9,561 14 7	3,113 0 7	83,775 1 3
III.—Confiscated drift and waif wood	.....	.....	.....	.....	748 13 0	225 9 0	2,331 14 9	100 0 0	.....	.....	.....	28 4 3	209 1 0	922 14 6	94 15 3	4,653 7 9
IV.—Revenue from forests not managed by Government:—																
a. Duty on foreign timber and other forest produce ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18 10 6	18 10 6
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—Miscellaneous:—																
a. Fines and forfeitures ...	.....	.....	.....	26 0 0	.....	.....	.....	20 0 0	.....	2 8 0	.....	.....	52 9 0	.....	59 0 0	154 1 0
b. Refunds	.....	.....	3 10 8	976 0 9	.....	297 15 0	.....	9 0 2	3 8 0	10 1 7	0 10 9	.....	17 5 10	2,070 8 10	.....	3,358 13 6
c. Other sources ...	.....	0 3 10	.....	308 0 0	937 2 7	435 0 6	174 12 11	902 1 0	4 1 6	281 6 0	292 6 6	476 15 0	11,273 11 2	5,240 0 7	2,871 8 6	23,197 6 1
Total Receipts ...	.....	0 3 10	3 10 8	62,315 9 3	16,256 3 4	12,301 13 6	12,420 13 8	53,503 2 9	7 9 6	4,742 12 7	743 13 3	2,694 13 3	3,76,045 5 3	83,221 15 11	29,466 4 3	6,53,634 3 3

Note—Correctness of figures confirmed in letter No. 711, dated 24th June 1887.

CALCUTTA,
The 31st May 1887.

JAS. TAYLOR,
Assistant Comptroller-General (Forests).

ANNUAL FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions during 1886-87.

BUDGET HEADS. A.—CONSERVANCY AND WORKS.	Direction.	Working Plans Division.	Darjeeling Division.	Darjeeling Sub-division.	Teesta Sub-division.	Kurseong Sub-division.	Julpaigori Division.	Buxa Division.	Chota-Nagpore Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhoom Sub-division.	Sunderbuns Division.	Chittagong Division.	Orissa Division.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Timber and other produce removed from the forests by Government Agency—																
a. Timber ...	.....	.....	.....	18 2 0	253 7 0	193 4 3	1,469 7 6	25,350 11 7	.....	.....	.....	1,481 4 10	.....	.....	1,987 5 3	30,691 10 8
b. Firewood and charcoal ...	.....	.....	.....	26,249 0 3	.....	190 0 0	.....	19 13 6	.....	.....	.....	847 15 3	.....	.....	.....	27,306 13 0
c. Bamboos ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,660 0 3	.....	.....	.....	.....	300 12 1	2,960 12 4
d. Sandal-wood ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
e. Grass and other minor produce ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 5 0	.....	0 6 0	.....	.....	13 4 3	15 15 3
II.—Timber and other produce removed from the forests by consumers or purchasers ...	.....	.....	.....	1,588 15 3	.....	252 0 0	.....	.....	.....	.....	.....	135 8 0	25,487 10 1	480 8 2	.....	27,944 0 6
III.—Confiscated, drift and waif wood ...	.....	.....	.....	.....	.....	.....	656 10 6	.....	.....	.....	.....	0 15	60 14 6	213 4 0	3 0 0	934 12 0
IV.—Revenue from forests not managed by Government—																
a.—Duty on foreign timber and other forest produce ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Revenue from shared and private forests	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
V.—Rent of leased forests, and payments to shareholders in forests managed Government	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VI.—Live-stock, stores, tools and plant—																
a.—Purchase of Cattle ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b.—Feed and keep of Cattle ...	.....	.....	.....	.....	.....	293 10 1	689 5 4	2,668 3 0	487 9 6	510 12 11	.....	651 11 5	.....	.....	1,506 6 8	6,807 10 11
c. Purchase of Stores, Tools and Plant ...	15 11 0	78 2 0	160 6 0	74 9 0	2 4 0	55 4 0	17 6 9	195 12 0	174 10 0	215 12 0	93 12 0	929 8 0	34,379 6 4	614 12 9	95 9 8	37,047 3 1
VII.—Communications, and buildings—																
a. Roads and bridges	.....	.....	.....	1,339 8 9	617 14 7	396 6 9	705 3 2	489 1 1	.....	207 4 6	781 0 0	1,231 2 11	.....	379 6 11	321 4 0	6,468 4 8
b. Buildings ...	.....	.....	.....	2,825 8 6	1,814 2 5	1,630 3 2	1,028 10 3	1,651 2 5	.....	1,220 10 0	184 5 3	1,003 3 0	1,280 2 11	2,242 4 9	117 6 6	14,997 11 5
c. Other works ...	.....	.....	.....	.....	.....	.....	.....	53 15 3	.....	.....	.....	11 11 0	398 1 7	.....	.....	463 12 10
VIII.—Demarcation, improvement and extension of forests—																
a. Demarcation ...	.....	.....	.....	498 2 9	987 1 6	506 13 8	940 8 9	1,242 10 8	.....	29 15 6	10 0 0	2,831 12 7	.....	743 13 4	1,094 3 6	8,837 2 3
b. Compensation for land and rights ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	1 7 3	.....	613 8 10	.....	.....	799 7 1	1,413 7 2
c. Surveys and working plans ...	.....	1,108 11 10	.....	.....	.....	10 0 0	.....	.....	.....	4 9 6	8 12 9	4 0 0	.....	119 2 0	30 0 0	1,284 4 1
d. Sowing and planting ...	.....	.....	.....	1,949 10 3	.....	791 8 6	.....	236 12 3	69 3 1	27 12 9	14 15 3	21 12 9	.....	3,007 13 4	1,340 12 3	7,460 4 5
e. Protection from fire ...	.....	.....	.....	58 3 9	1 323 9 6	3,865 7 7	1,353 11 5	3,762 5 8	.....	1,359 12 3	341 7 3	984 7 10	.....	141 14 1	1,075 14 3	14,711 13 7
f. Other works ...	.....	.....	.....	24 1 0	117 3 0	246 0 0	.....	137 11 6	29 2 6	.....	.....	.....	.....	151 13 6	.....	705 15 6
IX.—Miscellaneous—																
a. Refunds ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
b. Law charges ...	.....	.....	.....	.....	.....	.....	24 10 6	.....	.....	.....	.....	1 4 6	4 0 0	6 12 6	.....	53 11 0
c. Other charges	97 8 0	2 0 0	7 2 0	203 5 0	208 2 9	171 11 3	26 9 0	271 0 5	9 2 0	48 6 10	6 13 9	417 0 6	1,017 10 8	431 11 6	216 4 11	3,159 8 2
Total, A.—Conservancy and works ...	113 3 0	1,188 13 10	167 8 0	34,826 9 6	5,293 12 9	8,549 5 3	6,917 3 2	36,079 3 4	769 11 1	6,288 12 9	1,441 2 3	11,166 3 11	62,624 13 8	8,332 4 1	8,811 9 9	1,92,710 4 4

Note.—Correctness of figures confirmed in letter No. 711, dated 24th June 1887.

CALCUTTA,
The 31st May 1887.

JAS. TAYLOR,
Assistant Comptroller-General (Forests).

ANNUAL FORM No. 58.

FOREST DEPARTMENT, BENGAL.

Summary of Expenditure of the different Divisions during 1886-87.

BUDGET HEADS.	Direction.	Working Plans Division.	Darjeeling Division.	Darjeeling Sub-division.	Teesta Sub-division.	Kurseong Sub-division.	Julpaigori Division.	Buxa Division.	Chota Nagpur Division.	Palamow Sub-division.	Hazaribagh Sub-division.	Singbhum Sub-division.	Sunderbans Division.	Chittagong Division.	Orissa Division.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Brought forward, Total A., Conservancy and Works ...	113 3 0	1,186 13 10	107 8 0	34,826 9 6	5,293 12 9	8,549 5 3	6,917 3 2	36,079 3 4	769 11 1	6,288 12 9	1,441 2 3	11,166 3 11	62,624 13 8	8,533 4 1	8,811 9 9	1,92,710 4 4
B.—ESTABLISHMENTS.																
I.—Salaries—																
a. Conservators ...	14,568 13 0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14,568 13 0
b. Superior officers ...	2,850 0 0	6,940 5 2	3,900 0 0	5,966 3 0	6,050 0 0	3,450 0 0	6,724 13 1	6,686 10 8	9,163 11 9	3,502 12 0	.....	1,800 0 0	11,066 14 9	7,950 0 0	15,151 9 9	90,548 2 2
c. Subordinate Forest and Depôt establishments	1,380 0 0	200 0 0	.....	5,416 13 7	4,285 4 9	6,017 15 10	4,225 0 11	4,737 15 9	.....	3,827 1 1	894 3 6	4,337 13 8	14,119 8 7	10,464 7 1	3,907 12 0	63,814 5 9
d. Office establishments	4,360 5 2	641 0 11	461 2 6	1,039 4 10	646 11 0	1,104 3 4	767 1 0	931 11 6	1,265 11 0	644 12 9	.....	574 0 0	2,760 6 2	1,516 9 6	1,192 3 11	17,905 3 7
e. Deputation and special allowances ...	695 14 1	128 1 4	91 7 1	209 3 10	17 5 0	.....	.....	.....	.....	.....	.....	.....	248 11 2	1,083 15 2	...	2,474 9 8
II.—Travelling Allowances—																
a. Conservators ...	2,485 1 6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,485 1 6
b. Superior officers ...	997 5 8	3,190 10 10	455 9 0	1,854 13 0	1,475 4 0	1,028 4 6	540 6 0	1,421 10 0	803 0 0	661 14 6	.....	381 0 0	1,165 9 0	1,036 11 0	2,363 12 0	17,375 13 6
c. Subordinate Forest and Depôt establishments	977 11 10	167 9 6	.....	1,388 5 10	717 11 4	1,508 14 9	817 9 5	626 10 0	.....	676 5 4	202 3 4	856 15 8	53 1 6	1,075 6 2	310 1 4	8,878 10 0
d. Office establishments	715 10 4	90 8 1	12 7 7	47 13 0	114 13 2	277 8 4	4 5 4	27 11 4	77 6 8	67 10 8	.....	23 15 4	65 12 4	15 13 4	59 8 0	1,439 15 6
III.—Contingencies—																
a. Stationery	8 2 0	1 4 0	3 12 0	4 4 0	1 4 0	.....	.....	.....	0 9 6	1 0 0	0 2 6	.....	2 9 6	8 7 0	3 4 6	34 10 6
b. Carriage of tents and records	207 15 0	10 12 0	5 15 0	23 13 2	152 4 0	12 6 0	61 8 0	18 4 0	160 5 3	55 7 0	6 15 9	24 14 9	25 3 3	.....	4 5 0	770 0 9
c. Rents, rates and taxes	725 0 0	.....	300 0 0	896 0 9	.....	147 9 4	106 7 3	328 2 0	360 0 0	6 12 0	6 0 0	59 0 0	1,246 1 6	10 2 0	293 5 0	4,589 7 10
d. Pay of police guards	.....	.....	.....	.....	.....	.....	.....	.....	121 4 0	48 5 6	30 14 0	49 8 0	545 13 8	256 5 6	153 2 0	2,014 12 6
e. Official postage ...	292 9 0	15 8 0	60 0 0	36 8 0	57 10 0	138 14 6	43 11 6	159 11 0	155 0 0	137 8 2	48 1 0	277 2 3	654 3 6	126 7 6	65 5 0	2,947 5 2
f. Sundries	535 12 6	41 8 0	45 9 0	229 2 0	147 2 0	119 11 0	274 15 11	89 13 4								
Total B, Establishments ...	39,300 4 1	11,427 3 10	5,335 14 2	17,112 5 7	13,665 5 3	13,805 7 7	13,566 0 5	14,408 3 7	12,111 15 8	9,629 9 0	1,197 13 1	8,383 5 8	31,973 14 9	23,544 4 3	23,609 4 6	2,30,070 15 5
GRAND TOTAL OF EXPENDITURE	39,413 7 1	12,616 1 8	5,443 6 2	51,938 15 1	18,959 2 0	22,354 12 10	20,483 3 7	50,487 6 11	12,881 10 9	15,918 5 9	2,638 15 4	19,549 9 7	94,598 12 5	32,076 8 4	32,420 14 3	4,22,781 3 9

NOTE.—Correctness of figures confirmed in letter No. 711, dated 24th June 1887

CALCUTTA,
The 31st May 1887.

JAS. TAYLOR,
Assistant Comptroller-General (Forests).

Form No. 59.

FOREST DEPARTMENT, BENGAL.

Account Current for the year 1886-87.

	Rs. A. P.	Rs. A. P.
To Cash balance	.....	336 13 1
VIII.—Assessed taxes—		
Income tax deduction from salaries, &c.	.....	3,126 6 5
IX.—Forests—		
Revenue as per Annual Summary Form No. 58	.....	6,53,634 3 3
To Service Funds—		
Uncovenanted Service Family Pension Fund, Bengal	.....	3,597 7 0
„ Deposits	.....	77 13 0
„ Forest cash remittances (local)—		
Remittances from State treasuries ...	3,86,734 2 1	
Inter-divisional transfers	18,153 11 9	
		4,04,887 13 10
„ Advances recoverable	.....	2,66,042 9 11
„ Suspense	.....	148 10 9
„ Account current—other Governments—		
Government of India	3,644 14 6	
Ditto of North-Western Provinces and Oudh	62 0 0	
Ditto of Burma	179 13 0	
		3,886 11 6
„ Inter-departmental transfers—		
Public Works Department—other branches	44 13 0	
Military department, Bengal	161 10 0	
„ Civil Departments—		
Rs. A. P.		
Jails 837 3 0		
Mathematical Instrument Department 329 4 0		
Miscellaneous 1,055 3 0		
	2,221 10 9	
Marine Department	37,491 13 4	
		39,919 15 1
Total ...		13,75,039 7 10

	Rs. A. P.	Rs. A. P.
13 Forests—		
By Expenditure as per Annual Summary Form No. 58	.....	4,22,761 3 9
„ Deposits	.....	97 14 3
„ Forest cash remittances (local)—		
Remittances to State treasuries ...	6,09,045 14 7	
Inter-divisional transfers	18,472 3 9	
		6,27,518 2 4
„ Advances recoverable	.....	2,66,332 6 11
„ Suspense	.....	150 10 0
„ Account current—other Governments—		
Government of India	2,806 4 4	
Ditto North-Western Provinces and Oudh	15 0 0	
		2,821 4 4
„ Inter-departmental transfers—		
Public Works Department—State Railways—		
Rs. A. P.		
Northern Bengal State Railway 36,851 4 0		
Other branches 1,810 13 11		
	38,662 1 11	
Military Department, Bengal	15,147 11 9	
„ Civil Departments—		
Rs. A. P.		
Jails 64 8 0		
Miscellaneous 695 2 0		
	759 10 0	
Telegraph Department	216 0 0	
		54,785 7 8
By Cash balance	.....	562 6 7
Total ...		13,75,039 7 10

Note.—Correctness of figures confirmed in letter No. 711, dated 24th June 1887.

Calcutta,
The 31st May 1887.

Jas. Taylor,
Asst. Comptroller-General (Forests).

Form No. 60.

FOREST DEPARTMENT, BENGAL.

Revenue received, and outstandings on account of revenue during 1886-87.

Division.	Particulars.	Outstandings at commencement of year.	Value of sales and other revenue during year.	Total.	Amount realised during year.	Balance due to the Department at end of year.	Remarks.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction Division	.....	.....	.....	.....	.....	.....	
Working Plans Division	Miscellaneous other sources ...	.....	0 3 10	0 3 10	0 3 10	.....	
Darjeeling Division	Refunds	.....	3 10 8	3 10 8	3 10 8	.....	
Darjeeling Sub-division	Timber and other produce, &c.	360 8 0	61,985 1 3	62,345 9 3	62,315 9 3	30 0 0	Rs. A. P. From Public Works Department, Civil .. .. 10 0 0 From Public Works Department, Military 20 0 0
Teesta Sub-division	Ditto ditto ...	9 0 0	16,247 3 4	16,256 3 4	16,256 3 4	.....	
Kurseong Sub-division	Ditto ditto ...	.....	12,409 13 6	12,409 13 6	12,301 13 6	108 0 0	From J. R. Sharp, Esq., for drift wood.
Julpigori Division	Ditto ditto ...	.....	12,430 13 8	12,430 13 8	12,430 13 8	.....	
Buxa Division ...	Ditto ditto ...	.....	53,503 2 9	53,503 2 9	53,503 2 9	.....	
Chota Nagpore Division	Miscellaneous, refunds and other sources.	.....	7 9 6	7 9 6	7 9 6	.....	
Palamow Sub-division	Timber and other produce, &c.	.....	4,742 12 7	4,742 12 7	4,742 12 7	.....	
Hazaribagh Sub-division	Ditto ditto ...	.....	743 12 8	743 12 8	743 12 8	.....	
Singbhoom Sub-division	Ditto ditto ...	.....	2,504 13 3	2,504 13 3	(a) 2,504 13 3	.....	(a) Includes Rs. 100 revenue received in advance from Baboo G. C. Kundu for 150 cubic feet of sál timber at annas 10-8 per cubic feet. Timber not delivered during 1886-87.
Sunderbuns Division	Ditto ditto ...	.....	3,76,141 12 2	3,76,141 12 2	(b)3,76,045 5 8	.....	(b) Rs. 96-6-6 deducted on account of transfer charges in reduction of revenue.
Chittagong Division	Ditto ditto ...	.....	95,647 2 5	95,647 2 5	(c) 83,221 15 11	.....	(c) Rs. 12,425-2-6 deducted on account of transfer charges in reduction of revenue, being payment made to the Rajah of Hill Tipperah, his share of the Fenny revenue collections during 1885-86.
Orissa Division ...	Ditto ditto ...	.....	29,466 4 8	29,466 4 8	29,466 4 8	.....	
	Total ...	369 8 0	6,65,824 4 3	6,66,193 12 3	6,53,634 3 3	138 0 0	

Darjeeling,
The 15th July 1887.

A. L. Home,
Conservator of Forests, Bengal.

ANNUAL FORM No. 61.

FOREST DEPARTMENT, BENGAL.

Outstandings and Liabilities on account of Contractors and Disbursers for 1886-87.

DIVISION.	DEPARTMENT DEBTOR.			DEPARTMENT CREDITOR.			BALANCE DUE.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.	At commencement of year.	Payments made during year.	At close of year.	To department (outstandings).	By department (liabilities).
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Direction	.....	2,639 10 2	2,639 10 2	301 11 11	2,561 0 11	2,863 12 10	224 2 8	.....
Working plans	.....	1,767 11 0	1,767 11 0	.....	1,822 5 0	1,822 5 0	54 10 0	.....
Darjeeling	.....	259 1 11	259 1 11	12 3 6	251 0 0	263 3 6	4 1 7	.....
Darjeeling sub-division ...	.....	16,005 7 5	16,005 7 5	316 5 2	15,967 3 9	16,283 8 11	278 1 6	.....
Teesta ditto ...	.....	12,085 9 10	12,085 9 10	604 2 4	12,140 11 10	12,744 14 2	659 4 4	.....
Kurseong ditto ...	.....	17,045 5 8	17,045 5 8	758 4 5	16,923 14 7	17,671 3 0	625 13 4	.....
Julpigori	.....	12,697 10 5	12,697 10 5	232 13 6	12,647 9 8	12,880 7 2	182 13 9	.....
Buxa	.....	36,536 6 7	36,536 6 7	1,485 9 4	37,088 6 8	38,574 0 0	2,037 9 5	.....
Chota Nagpore	.....	955 10 10	955 10 10	449 1 11	531 4 4	990 6 3	34 11 5	.....
Palamow sub-division ...	.....	12,359 15 4	12,359 15 4	283 7 7	12,345 12 10	12,629 4 5	269 5 1	.....
Hazaribagh ditto ...	.....	2,356 4 4	2,356 4 4	71 11 4	2,332 11 6	2,404 6 10	48 2 6	.....
Singbhoom ditto ...	.....	14,339 6 8	14,339 6 8	1,692 2 4	15,016 3 3	16,708 5 7	2,368 14 11	.....
Sunderbuns	.....	86,690 10 2	86,690 10 2	5,770 5 9	86,355 2 6	92,125 8 3	5,434 14 1	.....
Chittagong	.....	25,190 0 4	25,190 0 4	1,454 6 10	25,099 2 8	26,553 9 6	1,363 0 2	.....
Orissa	.....	25,013 11 3	25,013 11 3	1,615 13 6	25,249 13 5	26,865 10 11	1,851 15 8	.....
Total ...	.....	2,65,942 9 11	2,65,942 9 11	15,048 3 5	2,66,332 6 11	2,81,380 10 4	15,438 0 5	.....

Note.—Correctness of figures confirmed in letter No. 711, dated 24th June 1887.

CALCUTTA,
The 7th June 1887.

JAS. TAYLOR,
Asst. Comptroller-General (Forests).

FORM No. 62.

FOREST DEPARTMENT, BENGAL.

Financial results of the year 1886-87.

DIVISION.	TIMBER AND OTHER PRODUCE REMOVED FROM THE FORESTS BY GOVERNMENT AGENCY.		OTHER REVENUE.		FORMATION, PROTECTION AND IMPROVEMENT OF FORESTS.	TOTAL.		REMARKS.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Working plans	.....	.....	.....	.....	15,381	.....	15,381	
Darjeeling	43,744	33,719	47,133	25,818	45,610	90,877	1,05,147	Comprising the Darjeeling, Teesta and Kurseong sub-divisions.
Julpigori	5,836	2,507	6,585	8,506	11,223	12,421	22,226	
Buxa	49,908	35,936	3,595	4,263	13,053	53,503	53,252	
Chota Nagpore	4,884	8,552	3,216	2,093	46,795	8,100	57,440	Comprising the Palamow, Hazaribagh, and Singbhoom sub-divisions.
Sunderbuns	.....	61	3,76,045	84,344	14,802	3,76,045	99,207	
Chittagong	960	581	82,262	15,775	18,486	83,222	34,842	
Orissa	4,428	4,052	25,038	12,155	13,979	29,466	30,186	Comprising th Angul and Khorda sub-divisions.
Total ...	1,09,760	85,408	5,43,874	1,53,044	1,84,329	6,53,634	4,22,781	

DARJEELING,
The 15th July 1887.

A. L. HOME,
Conservator of Forests, Bengal.

APPENDIX A.

Statement showing the cubic contents of Trees sold to Permit-holders which were actually measured during 1886-87.

Division.	Trees.		Volume in Cubic Feet Wood.			
	Description.	Number.	Timber.	Fuel.	Total.	Average per tree.
Darjeeling Sub-division.	Búk	5	865	370	1,235	247
	Champ	6	1,179	970	2,149	358
	Kawala	8	1,105	365	1,470	184
	Chilauni	3	295	110	405	135
	Total ...	22	3,444	1,815	5,259	239
Teesta Sub-division.	.....	.....	.....	.....	.....	.....
Kurseong Sub-division.	Sâl	4	328	65	393	98
	Búk	1	164	150	314	314
	Champ	1	159	30	189	189
	Chilauni	1	101	30	131	131
	Lampatia	1	50	15	65	65
	Tún	1	197	125	322	322
	Goguldhúp	1	199	25	224	224
	Panisáj	1	134	30	164	164
	Mainakât	2	367	70	437	218
	Dubdubia	1	129	35	164	164
	Lutter	1	120	20	140	140
	Total ...	15	1,948	595	2,543	170

APPENDIX B.

FORM No. 2.

FOREST DEPARTMENT, BENGAL.

Register of yield of the Darjeeling Station-supply Working Circle, Darjeeling Sub-division.

Block.	Compartment. Number.	Compartment. Area in acres.	Class of forest.	Provisions of working-plan. Year of working.	Area to be taken in hand, acres.	Timber and fuel. Nature of felling.	Number of trees to be felled or girdled.	Yield in cubic feet, solid. Logs.	Scantling.	Poles.	Fuel.	Total.	Other forest produce. Kind and quantity.	Revenue. Gross.	Net.	Result of Operations. Timber and fuel. Area taken in hand acres.	Number of trees felled or girdled.	Yield in cubic feet, solid. Logs.	Scantling.	Poles.	Fuel.	Total.	Other forest produce. Kind and quantity.	Revenue. Gross.	Net.	Remarks.
														Rs.	Rs.									Rs. A. P.	
Balasan (part) ...	...	130	High timber, mixed oak, &c.	1886-87	130	Regeneration fellings.	...	...	...	...	.....	325,000	...	...	...	...	} ...	695	...	...	76,169	76,864	{ Fodder ...	3 0 0	.....	
Ditto (do.) ...	...	370	Ditto ...	.....	...	Selection fellings and removal of dry wood.	...	...	...	...	.....	.....	...	...	...	...	}						{ Cows... ...	130 0 0	.....	
Chongtong (do.) ...	...	400	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	5	360	...	...	19,250	20,060	{ Fodder ...	143 11 0	.....	
Rishihat	...	835	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	133	...	...	1,750	1,883	{ Cows ...	134 8 0	.....	
Nai	...	839	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	4	1,813	...	...	175	1,988	{ Fodder ...	46 6 9	.....	
Goom	...	600	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	46	2,474	...	...	1,400	3,874	{ Cows ... Fodder ...	172 0 9 67 8 6	.....	
Pachim	...	468	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	339	1,046	...	... ...	1,385	.....	.....	...	
Sonada	...	645	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	53	...	...	27,675	27,728	Fodder ...	40 8 0	.....	
Rungbul	...	650	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	...	...	...	3,687	3,687	Fodder ...	2 0 0	.....	
Do teria	...	534	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	191	...	...	72,266	72,457	Fodder ...	72 14 9	.....	
Tungsong	...	653	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	284	...	...	13,213	13,497	Fodder ...	106 0 0	.....	
Poobong	...	614	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	1,666	...	...	147,854	149,519	Fodder ...	220 10 9	.....	
Total ...	...	...	.....	.....	...	.....	...	...	...	...	.....	325,000	...	...	...	...	57	6,458	1,046	...	363,369	372,783	.....	1,135 2 6	.....	Trees 57, at 250 = 14,250 Add ... ... 372,783 Total ... 387,033 Instead of ... 325,000

Jalapahar Supply Working Circle.

																								Rs. A. P.	
Rangirum (part)...	...	70	High timber, mixed oak, &c.	1886-87	70	Regeneration fellings.	...	...	...	...	.....	175,000	...	...	...	...	} 2	208	6,131	...	.....	6,339	Fodder ...	10 8 0	.....	
Ditto (balance)	...	430	Ditto ...	.....	...	Selection fellings and removal of dry wood.	...	...	...	...	.....	.....	...	...	...	...	}									
Dawaipani ...	...	857	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	...	...	...	.....	.....	.....	.....	.....	
Rungjo ...	...	1,100	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	...	12	...	.....	12	{ Fodder ... Cows ...	9 8 0 264 0 0	.....	
Rangbi	...	1,037	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	7	...	8	...	.....	8	{ Fodder ... Cows ...	5 0 0 80 0 0	.....	
Tiger Hill	...	755	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	...	...	...	.....	.....	Cows ...	86 0 0	.....	C. ft.
Senchal	...	517	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	...	...	75	34,947	35,022	{ Fodder ... Cows ...	116 15 3 174 0 0	.....	Trees 8, at 250 = 2,250 Add 113,733
Rangnu	...	500	Ditto ...	.....	...	Ditto ...	...	...	...	...	.....	.....	...	...	...	...	...	1,972	...	...	70,379	72,352	.....	.....	.....	Total ... 115,983
Total ...	...	...	.....	.....	...	.....	...	...	...	...	.....	175,000	...	...	...	...	9	2,181	6,151	75	106,326	113,733	.....	755 15 3	.....	Instead of ... 175,000

APPENDIX B—*continued.*

FORM NO. 2.

FOREST DEPARTMENT, BENGAL.

Register of yield of the Sukna Working Circle, Sukna Range, Kurseong Sub-division.

Block.	Compartment. Number.	Compartment. Area in acres.	Class of forest.	Provisions of working plan. Year of working.	Timber and fuel. Area to be taken in hand, acres.	Nature of felling.	Number of trees to be felled or girdled.	Yield in cubic feet, solid. Logs.	Scantling.	Poles.	Fuel.	Total.	Other forest produce. Kind and quantity.	Revenue. Gross.	Net.	Result of operations. Timber and fuel. Area taken in hand, acres.	Number of trees felled and girdled.	Yield in cubic feet, solid. Logs.	Scantling.	Poles.	Fuel.	Total.	Other forest produce. Kind and quantity.	Revenue. Gross.	Net.	Remarks.
1886-87.														Rs.	Rs.									Rs.	Rs. A. P.	
Kuklong ...	5	171	High forest irregular with large proportion of thicket and poles.	1886-87	171	Small thinning.	.....	...	...	...	44,889	44,889	Bamboo 2,500	...	...	171	.....	...	...	...	...	.....	Bamboos, 912 Fodder grass, 32 cooly loads. Thatch grass, bundles 32.	... ...	30 0 0 6 8 0 1 0 0	
Sukna	All	1,262	Ditto ...	Do.	1,262	Selection felling.	Sál 60 Others 300.	...	...	...	.....	.....	Bamboo 3,000	...	...	1,262	Others 40	187	9	...	142	338	Bamboos, 2,048 Grazing fodder. Grass ... ... Thatch grass, bundles 3,189.	... ...	33 0 0 56 2 0 6 0 0 25 14 6	316 animals, at three annas. 337 cooly loads.
Chamta ...	2	103	Ditto ...	Do.	103	Small thinning.	.....	...	...	...	27,562	27,562	.....	...		...	.....	...	...	...	...	.....	Thatch grass, bundles 168.	...	5 2 0	
Adalpur ...	.....	...	.....	.....	.....	.....	.....	...	...	...	.....	.....	.....	...	...	...	.....	...	...	...	...	...	.....	...	.....	
Kynanuka ...	.....	...	.....	.....	.....	.....	.....	...	...	...	.....	.....	.....	...	...	...	.....	...	...	...	262	262	.....	...	.....	
Rungdung ...	3	178	Ditto ...	Do.	178	Improvement thinning.	.....	...	...	...	202,475	202,475	Bamboo 2,500	...	...	178	.....	30	...	...	21,403	21,433	Bamboo 664	...	27 7 0	
Total ...	.....	...	.....	.....	.....	.....	360	...	...	...	274,925	274,925	.....	...	...	...	40	217	9	...	21,807	22,033	.....	...	316 2 3	

The number of maunds firewood fixed per acre for small thinning, 150 maunds.
Ditto ditto for improvement thinning, 650 maunds.
The factor of conversion has been taken at 1¾ cubic feet solid = 1 maund firewood.
For the reasons given in this return for 1884-85, the material unremoved during that year on account of its being in excess of the *true* capability, although its removal may have been prescribed by the working plan, is not brought forward.

APPENDIX B– *continued.*

FORM No. 2.

FOREST DEPARTMENT, BENGAL.

Register of yield of the Buxa Reserve Working Circle, Buxa and Borojhar Ranges, Buxa Division, 1886-87.

Block.	Compartment.		Class of forest.	Provisions of working plans.											Result of operations.									Remarks.
					Timber and fuel.							Other forest produce.			Timber and fuel.							Other forest produce.			
								Yield in cubic feet, solid.					Revenue.				Yield in cubic feet, solid.						Revenue.	
	Number.	Area in acres.		Year of working.	Area to be taken in hand.	Nature of felling.	Number of trees to be felled or girdled.	Logs.	Scantlings.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	Area taken in hand in acres.	Number of trees felled or girdled.	Logs.	Scantlings.	Poles.	Fuel.	Total.	Kind and quantity.	Gross.	Net.	
					Acres.									Rs.	Rs.	Acres.								Rs.	Rs. A. P.	
Block II (Poro)	3	1,733	High timber sál ...	1883-84	.....	Selection ...	.....	...	...	...	.....	.....	...	...	...	1,733	64	2,696	...	.....	...	2,696	.....	...	.....	See paragraph 27 of report.
Ditto ...	7	1,113	Ditto ...	1883-84	.....	Ditto ...	.....	...	...	...	.....	.....	...	...	...	1,113	107	4,878	...	.....	...	4,878	.....	...	.....	
Ditto ...	9	1,246	Ditto ...	1884-85	.....	Ditto ...	.....	...	...	...	.....	.....	...	...	...	1,246	104	4,444	...	.....	...	4,444	.....	...	.....	
Ditto ...	10	1,711	Ditto ...	1888-89	1,711	Ditto ...	2,310	...	...	...	.....	.....	...	...	...	1,711	497	20,647	...	.....	...	20,647	.....	...	.....	
Ditto ...	11	866	Ditto ...	1887-88	866	Ditto ...	1,169	...	...	...	.....	.....	...	...	...	866	609	24,916	...	.....	...	24,916	.....	...	.....	
Ditto ...	13	1,536	Ditto ...	1884-85	.....	Ditto ...	.....	...	...	...	.....	.....	...	...	...	1,536	242	10,451	...	.....	...	10,451	.....	...	.....	
Ditto ...	14	1,876	Ditto ...	1886-87	1,876	Ditto ...	2,532	...	...	...	.....	.....	...	...	...	1,876	187	6,530	...	.....	...	6,530	.....	...	.....	
Ditto ...	All	.....	Ditto ...	.....	.....	Clearances ...	.....	...	...	...	.....	.....	...	...	...	...	.....	.....	...	.....	336	336	.....	...	.....	
																	2	300	...	.....	...	300	.....	...	.....	Sold to permit-holders.
Block III (Rajabhatkawa).	All	.....	Ditto ...	.....	.....	Ditto ...	.....	...	...	...	.....	.....	...	...	...	...	742 dry poles.	.....	...	23,260	...	23,260	.....	...	.....	Ditto.
																	...	.....	...	.....	2,758	2,758	2,696 bamboos.	...	26 14 4	
																							4,374 grass loads.	...	68 5 6	
																							10 loads goicha leaves.	...	0 2 6	
																							Grazing fees.	...	168 8 0	
																	2	300	...	.....	...	300	.....	...	.....	Ditto.
Block IV (Panbari).	All	.....	Ditto ...	.....	.....	Ditto ...	.....	...	...	...	.....	.....	...	...	...	...	2 dry poles.	.....	...	60	...	60	.....	...	.....	Ditto.
																	...	.....	...	.....	142	142	Grazing fees.	...	284 3 8	
																							1,982 grass loads.	...	12 3 6	
																							34 loads goicha leaves.	...	0 3 6	
																							215 bamboos.	...	2 2 4	
Total ...	...	.....	.....	.....	.....	.....	.....	...	...	...	.....	.....	...	...	...	...	.....	75,163	...	22,320	3,236	100,718	.....	...	673 0 2	

APPENDIX B—*continued.*

FORM No. 3.

FOREST DEPARTMENT, BENGAL.

Record of works of Reproduction and Improvement in the Darjeeling Station-supply Working Circle, Darjeeling Sub-division, for 1886-87.

Block.	Compartment.	Provisions of Working Plan.			Result of Operations.		Remarks.
		Year in which to be carried out.	Description of work.	Cost.	Description of work.	Cost.	
				Rs.		Rs.	
					Plantations—		
					Extensions—Dooteria, 48 acres	282	
					Up-keep—Dooteria	406	
					Rungbul	134	
					Tungsong	191	
					Goom	125	
					Total ...	1,327	
					Repairs to roads and inspection paths	1,057	
					Erection of and repairs to buildings, including depôts	1,569	

Record of works of Reproduction and Improvement in the Jalapahar supply Working Circle, for 1886-87.

					Plantations—		
					Up-keep—Rangnu and Rangirum ...	36	
					Repairs to roads and inspection paths	176	
					Erection of and repairs to buildings ...	955	

FORM No. 3.

FOREST DEPARTMENT, BENGAL.

Record of works of Reproduction and Improvement in Sukna Working Circle, Sukna Range, Kurseong Sub-division.

Block.	Compartment.	Provisions of Working Plan.			Result of Operations.		Remarks.
		Year in which to be carried out.	Description of work.	Cost.	Description of work.	Cost.	
						Rs. A. P.	
Adalpur	2	1886-87 ...	Planting and restocking blanks	.....	51¼ acres were planted out with 1,400 bamboos ...	246 0 0	
Kuklong	Half	1886-87 ...	372 acres to be freed from creepers	.....	372 acres freed from creepers	34 14 0	
Rungdung	4	1886-87 ...	165 ditto ditto	.....	165 ditto ditto	15 7 6	
					GENERAL.		
					Along the south boundary of the Chamta block 3,800 cuttings of rubber and seedlings of mango and jack were put down in about 2½ acres	152 0 0	
					Up-keep of paper mulberry plantation in the Chumta block, compartment 5	15 0 0	
					Up-keep of bamboo plantation in Chamta	12 0 0	
					Ditto of Kynanuka compartment 2, divi-divi plantation (2 acres)	10 0 0	
					Filling blanks in Kynanuka compartment, 2 with 2½ divi-divi seedlings	1 8 0	
					Up-keep of 2 acres of Sukna nursery and restocking with 3,500 India-rubber cuttings	30 8 0	
					Planted 113 mahogany seedlings along both sides of the Sukna Mahanadi road	5 10 3	
					UP-KEEP OF ROADS.		
					Chamta Adalpur block road (1½ miles)	13 4 0	
					Sukna Muhanadi road branch (½ mile)	2 12 0	
					Kuklong Valley road (2½ miles)	26 8 0	
					Kynanuka north boundary road (1 mile)	12 10 0	
					Clearing bungalow roads	3 8 0	
					Ranger's bungalow repaired	40 0 0	
					Total ...	620 9 9	

APPENDIX B.—*concluded.*

FORM NO. 3.

FOREST DEPARTMENT, BENGAL.

Record of works of Reproduction and Improvement in the Buxa Reserve Working Circle, Buxa Division.

Block.	Compartment.	Provisions of working plan (or plan of operations sanctioned for the year and the working plan).			Result of operations.		Remarks.
		Year in which to be carried out.	Description of work.	Cost.	Description of work.	Cost.	
				Rs.		Rs.	
All blocks	.....	1886-87 ...	Clearing of boundaries and compartment lines.	.....	Clearing 34·3 miles	514	
Poro	3, 7, 9, 11, 13	1886-87 ...	Guram and Dima road repairs ...	.....	Repairing 13 do.	76	
Other blocks ...	.....	1886-87 ...	Compartment inspection lines to be made passable for elephants and ponies.	.....	Borojhar satali inspection path constructed 12 miles.	145	
					Lines made passable, 67 miles	968	
All blocks	.....	1886-87 ...	Outer savannahs to be burnt, and fire traces cleared and burnt.	.....	Burnt and cleared, 16·4 do.	349	
Ditto	.....	1886-87 ...	Buildings, general repairs and purchase of house at Alipur depôt.	.....	Buildings repaired	786	
					Alipur depôt house purchased	350	
Rajabhat kawa ...	15	1886-87 ...	Planting out mahogany	.....	One acre planted	236	
Poro	11, 14	1886-87 ...	Clearing of creepers	.....	Cleared, compartments 11, 12 and 14, 3,056 acres.	130	
Rajabhat kawa ...	13, 14 (sál tracts).	1886-87 ...	Ditto	.....	Cleared, compartments 13 and 14, 1,110 acres.	.....	Not paid for during year.
Borojhar Satali ...	N.-W. portion (sál tracts).	1886-87 ...	Ditto	.....	Cleared sál tracts, 1,280 acres	.....	
					Total ...	2,845	

APPENDIX C.

Services of Officers.

Mr. H. H. Davis, Deputy Conservator, continued to hold charge of the Orissa Forest division throughout the year, and also of the Khorda sub-division, in addition to his other duties, from 16th August to 14th November and from 28th November to the close of the year. He has fully maintained his reputation as a most energetic and useful officer. Mr. Davis' confirmation in the first grade of Deputy Conservators was cancelled by the Government of India. He was appointed sub. *pro tem.* in that grade from 11th November 1885 to 20th June 1886, when he reverted to his officiating appointment, and was afterwards confirmed in the first grade of Deputy Conservators from the 30th January 1887.

Mr. R. H. M. Ellis, Deputy Conservator, second grade, was in charge of the Chittagong division up to the 5th May, and assumed charge of the Sunderbuns division on the 12th of that month. He has since that date continued in charge of the Sunderbuns division, and has displayed much energy in the execution of his duties. He officiated in the first grade of Deputy Conservators from 5th July to 23rd September 1886.

Mr. G. A. Richardson, Deputy Conservator, third grade, was in charge of the Buxa division to the 20th April, and assumed charge of the Chittagong division from the 6th May 1886. He has continued generally to work to the Conservator's satisfaction, though he has not been as active in his inspections in the Chittagong division as could be desired.

Mr. E. G. Chester, Deputy Conservator, third grade, was in charge of the Darjeeling and Working Plans divisions throughout the year, with the exception of the period 9th to 31st October 1886, when he was absent on deputation to attend the Forest Conference at Dehra Dún. He was also from the commencement of the year in charge of the Teesta sub-division up to 2nd May 1886, and of the Darjeeling sub-division up to 21st of that month, and he officiated as Conservator of Forests, third grade, without being relieved of any of his other duties. from 9th June to 20th August 1886. He is an excellent officer, and most conscientious and painstaking in the execution of his duties.

Mr. F. B. Manson, Deputy Conservator, third grade, retained charge of the Chota Nagpore division and of the Hazaribagh sub-division throughout the year, except for three months, from 16th April 1886, when he proceeded on privilege leave. He was confirmed in his grade with effect from 11th November 1885, and not from 1st January 1886, as recorded in paragraph 101 of last year's report, and has continued fully to maintain his reputation as a hardworking officer; he has also displayed much tact and judgment in the manner in which he has carried out his duties as Joint Forest Settlement Officer in Singbhoom.

Mr. A. R. Grant, Deputy Conservator, fourth grade, was in charge of the Julpigori division up to 22nd October 1886, and assumed charge of the Teesta sub-division, Darjeeling division, to which he was transferred at his own request, on 3rd November 1886. He was permitted on the ground of ill-health to reside in Darjeeling under the orders of Government to the end of October, provided that he visited his office at Julpigori for one week in each month. The Conservator regrets that Mr. Grant has not shown any inclination during the year under report to attempt either by hard work or by displaying an interest in his duties to gain the approbation of the officers under whom he serves.

Mr. W. M. Green, Deputy Conservator, fourth grade, made over charge of the Sunderbuns division on the 12th, and assumed charge of the Darjeeling sub-division on the 22nd May 1886. He was also in charge of the Kurseong and Teesta sub-divisions, Darjeeling division, for short periods in addition to his other duties, during transfers of officers, and has worked to the Conservator's satisfaction. He officiated in the third grade of Deputy Conservators from 16th April to 20th August 1886.

Mr. W. Johnston, Deputy Conservator, fourth grade, was in charge of the Teesta sub-division, Darjeeling division, from 3rd May to 15th October 1886, and of the Julpigori division from 22nd October to 23rd March 1887, when he proceeded on leave preparatory to a year's furlough on medical certificate. He officiated in the third grade of Deputy Conservators from 9th June to 16th July 1886. The Conservator regrets that he is unable to report favourably on Mr. Johnston's services.

Mr. C. A. G. Lillingston, Deputy Conservator, fourth grade, was in charge of the Palamow sub-division, Chota Nagpore division, up to 14th November, and joined the Kurseong sub-division, Darjeeling division, on 4th December 1886. He was also in charge of the Chota Nagpore division and of the Hazaribagh sub-division of that division from 16th April to 15th July 1886 in addition to his other duties, and has worked well, though he has not exerted himself sufficiently in the study of departmental rules and procedure.

Mr. R. L. Heinig, Assistant Conservator, first grade, was transferred from the Kurseong sub-division, Darjeeling division, on 17th April, and assumed charge of the Buxa division, of which he retained charge to the close of the year, on 22nd April 1886. He has worked with energy in carrying out his duties in the forests, but has displayed a certain

want of tact in his dealings with officers of other departments—a fault which the Conservator trusts he will not again have to notice.

Mr. H. D. D. French, Assistant Conservator, third grade, was attached to the Working Plans division from 19th April 1886 to the 23rd March 1887, when he assumed charge of the Julpigori division. He was on examination leave from 3rd September to 2nd November 1886. Mr. French gives promise of becoming a good officer, and has worked with a will.

Mr. E. E. Wylly, Sub-Assistant Conservator, first grade, was in charge of the Khorda sub-division, Orissa division, up to 27th November 1886, except from 16th August to 15th November 1886, when he was on examination leave, and joined the Sunderbuns division, to which he was attached to the close of the year, on 6th December 1886. He has displayed much energy in the discharge of his duties in the Sunderbuns division.

Baboo Sreedhur Chuckerbutty, Sub-Assistant Conservator, third grade, has been in charge of the Singbhoom sub-division, Chota Nagpore division, throughout the year, and has done excellent service.

Mr. J. C. Mendes, Sub-Assistant Conservator, third grade, made over charge of the Kurseong sub-division, Darjeeling division, on 26th October, and received charge of the Palamow sub-division, Chota Nagpore division, on 14th November 1886. He has been lax in carrying out sanctioned works, which he in some instances neglected altogether, and in the supervision of his subordinates, and has generally displayed a want of interest and energy in the execution of his duties.

Baboo Shama Churn Chuckerbutty, Sub-Assistant Conservator, third grade, has been in charge of the Angul sub-division, Orissa division, throughout the year. He has also been careless in carrying out orders.

Mr. E. E. Slane, Sub-Assistant Conservator, on probation, joined the Forest School at Dehra Dún for the course of instruction on 24th June 1886, and from the reports received he is doing well.

Messrs. E. J. N. James and R. Quinnell, Sub-Assistant Conservators, on probation, joined their appointments on 4th and 11th December 1886, and were respectively attached to the Working Plans and Orissa divisions to the close of the year. The Conservator is glad to record that both have displayed much zeal in, and aptitude for, forest work.

R. D'R & others—Reg. No. 6161J—851—3-8-87.